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Issue Log on ISO/DIS 10303-214

ABSTRACT:

This document contains the issue log and solutions for the issues concerning the AP214 'Core Data for Automotive Mechanical Design Processes' for the DIS version with the number ISO TC184 SC4 N765.

KEYWORDS:
Application Protocol, automotive, mechanical design, Issue Log

COMMENTS TO READER:

This document contains all ballot comments that have been issued against the DIS document of AP214. In all cases solutions are provided that reflect the discussion solutions of the AP214 issue resolution workshops.

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Introduction

The issue log contains issues raised against the ISO/DIS 10303-214 document.

Clause 1 (Abbreviations) of this document contains a list of abbreviations, used within the issue log.

Clause 2 (AP214 Units of Functionality) contains an ordered list of the Units of Functionality defined in ISO/DIS 10303-214 (for a reference in the issue entry Related Part/UoF).

Clause 3 (Overview) contains an ordered overview of the issues, providing information about issue reference number, country number, issue status and issue abstract. The reference number is an arbitrary but unique number to identify an issue.

Clause 4 (Issues) contains a complete description of the issues and their solutions.

Annex A provides a reference list ordered by country numbers (using the original issue numbers) to help finding issue reference numbers of a specific country.

Annex B provides a reference list ordered by technical topics (association to UoFs) to help finding issue reference numbers of a specific area of interest (UoF).

1 Abbreviations

This part of ISO 10303 makes use of the following abbreviations:

- AIAG   Automotive Industry Action Group

- AIM   Application Interpreted Model

- AP   Application Protocol

- ARM   Application Reference Model

- CC   Conformance Class

- FRA   France

- GALIA   Groupement pour L'Amelioration des Liaisons dans l'Industrie Automobile

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- Gen   General

- GER   Germany

- JAMA   Japan Automotive Manufacturers Association, Inc.

- JAP   Japan

- Odette   Organization for Data Exchange by Teletransmission in Europe

- SWE   Sweden

- SWI   Switzerland

- UK   United Kingdom

- UoF   Unit of Functionality

- USA   United States of America

- VDA   Verband der Automobilindustrie e.V.

2 AP214 Units of Functionality

The table given as follows reflects the definition of the UoFs as included in the DIS version of AP214.

AP214-UoF		
C1	surface_condition	surface conditions
D1	explicit_draughting	draughting
D2	associative_annotation	
E1	external_reference_mechanism	external reference
FF1	user_defined_feature	features
FF2	included_feature	
FF3	generative_featured_shape	
G1	wireframe_model_2d	geometry
G2	wireframe_model_3d	
G3	connected_surface_model	
G4	faceted_b_rep_model	
G5	b_rep_model	
G6	compound_model	
G7	csg_model	
G8	geometrically_bounded_surface_model	
K1	kinematics	kinematics
MD1	measured_data	measured data
PR1	item_property	properties
P1	geometric_presentation	presentation
P2	annotated_presentation	
P3	shaded_presentation	
S1	product_management_data	product structure
S2	element_structure	
S3	item_definition_structure	
S4	effectivity	
S5	work_management	
S6	classication	
S7	specification_control	
S8	process_plan	
T1	dimension_tolerance	tolerances
T2	geometric_tolerance	

3 Overview

The following table contains an ordered overview of the issues, providing information about reference number, originator country with number, issue status, and abstract issue description. The table is ordered due to the unique reference number, in the same way as the complete issue description in clause 4.

Ref #	Country #	State	Sentence/abstract/keywords
1	GER 1	Closed	definition of Classification_attribute should be improved
2	GER 2	Closed	definition of Date_and_person_assignment.role is not correct
3	GER 3	Closed	general editorial issue
4	GER 4	Closed	improve definition of class_condition_association
5	GER 5	Closed	duplicate assertions in mapping tables
6	GER 6	Closed	mapping of Design_discipline_item_definition not clear
7	GER 7	Closed	Assertion and mapping missing?
8	GER 8	Closed	Note not necessary?
9	GER 9	Closed	different values for association_type, relation_type, application_context, ... in definition and mapping table
10	GER 10	Closed	Name of attribute orientation of thread_feature
11	GER 11	Closed	Typo in constructive_geometry_association.auxiluary_geometry
12	GER 12	Closed	Add mapping rule for operator = 'implication' at mapping of specification inclusion.
13	GER 13	Closed	Sentence/abstract/keywords: Mapping of product_structure_relationshp to product_definition_usage
14	GER 14	Closed	Simplify mapping of context_dependent_appearance_assignment to group, layer on basis of Part 46 TC1.
15	GER 15	Closed	Map Specific_item_classification.classification_type to product_related_product_category.
16	GER 16	Closed	Map Feature_parameter.parameter_name (opt) to applied_identification_assignment rather than name_assignment.
17	GER 17	Closed	Mapping path of class_condition_association to specification_expression is unclear.
18	GER 18	Closed	Mapping of #1 general case is unclear.
19	GER 19	Closed	Explanatory text in Mapping table refers to 'first' element in a set.
20	GER 20	Closed	camera_model_d3_with_hlhsr missing in CC04.
21	GER 21	Closed	Select_type group_item is incomplete (styled_item, draughting_callout missing).
22	GER 22	Closed	Permissive list of values for the attribute 'value_determination', cf. 4.2.399.4
23	GER 23	Closed	Mapping of the assertion 'Classification_attribute to property_value (as attribute_value)
24	GER 24	Closed	SELECT approval_element_select
25	GER 25	Closed	Classification_attribute_relationship is required.
26	GER 26	Closed	restrict_multi_language_* RULEs are faulty
27	GER 27	Closed	WR10 of applied_date_assignment and applied_date_and_time_assignment has a bug.

28	GER 28	Closed	Mappings of affected_plane at geometric_tolerance subtypes needs to be corrected.
29	GER 29	Closed	Inclusion of Feature_group ?
30	GER 30	Closed	General_feature needs profile and path.
31	GER 31	Closed	Replicate_base_assignment to feature_occurrence instead of feature_definition
32	GER 32	Closed	Placed_feature approach for thread
33	GER 33	Closed	Add feature_definition.maximum_feature_limit
34	GER 34	Closed	Represent Round_hole with top_chamfer as compound_hole.
35	GER 35	Closed	Add explicit face representation to transition_feature types as attributes for AP224 compatibility.
36	GER 36	Closed	Rename attributes of Directed_taper (without draft_...).
37	GER 37	Closed	Make location_and_orientation attribute mandatory in the AP214 ARM, consistent with AIM and AP224.
38	GER 38	Closed	Ngon_profile with diameter and flag for circumscribed_or_across_flats.
39	GER 39	Closed	Add profile_limit at Closed_profile subtypes.
40	GER 40	Closed	Replace Flat_with_chamfer_bottom by Flat_with_taper_bottom.
41	GER 41	Closed	Add optional attribute slot_depth at Slot_feature.
42	GER 42	Closed	Rename of feature attribute names in AP214 ARM in accordance with AP224 and better application meaning.
43	GER 43	Closed	Ngon_profile available for General_boss.
44	GER 44	Closed	Attribute is_applied_to unnecessary for Through_bottom_condition.
45	GER 45	Closed	Mandatory and optional attributes for Thread_specification and Defined_thread.
46	GER 46	Closed	Circular_pattern.rotation should be optional.
47	GER 47	Closed	Name of attribute base_fillet_radius of form_feature_in_panel
48	GER 48	Closed	Name of attribute target_fillet_radius of form_feature_in_panel
49	GER 49	Closed	Name of attribute base_fillet_radius of panel_hole_with_barring
50	GER 50	Closed	Missing attribute in application object vector_appearance
51	GER 51	Closed	Select: documented_element _select
52	GER 52	Closed	Mapping of group
53	GER 53	Closed	Mapping of item_instance
54	GER 54	Closed	Mapping of effectivity.effectivity_context
55	GER 55	Closed	item_instance defined as product_identification
56	GER 56	Closed	Explanation of compound datum
57	GER 57	Closed	Explanation of tolerancing of feature dimensions
58	GER 58	Closed	Dimension callout without projection lines
59	GER 59	Closed	applied_group_assignment has undecidable where-rules
60	GER 60	Closed	additional rules should forbid isolated shape_representations
61	GER 61	Closed	uniqueness requirement for item.id not mirrored in AIM
62	GER 62	Closed	wrong coding of round_hole.wr4
63	GER 63	Closed	wrong coding of draughting_annotation_occurrence.wr7 (AIC 504)
64	GER 64	Closed	restrict_product_definitions_for_product_definition_relationship.wr2 has mismatch in formal proposition and EXPRESS coding
65	GER 65	Closed	shape_element does not account for shape_aspect.product_definitional
66	GER 66	Closed	draughting_model_annotation_layers too restrictive

67	GER 67	Closed	mapping of associated_draughting_callout
68	GER 68	Closed	mapping of geometric_dimension
69	GER 69	Closed	mapping of a value_limitation on a dimension_value introduces redundant entity paths
70	GER 70	Closed	applied_preson_organization_assignment.wr5 wrongly coded
71	GER 71	Closed	naming of centre_of_mass requirement
72	GER 72	Closed	shape_dependent_property description of AO ambigious
73	GER 73	Closed	AO model_image states unclear requirements with view_volume_placement
74	GER 74	Closed	requirement to associate text to elements in the 3D model without leader lines to captured
75	GER 75	Closed	function item_correlation is wrongly coded
76	GER 76	Closed	axis to which shape_dependent_properties are computed should be part of the requirements for shape_dependent_property
77	GER 77	Closed	syntax error in mapping of AO unit
78	GER 78	Closed	coordinate space of styled_geometric_model too restricted in ARM
79	GER 79	Closed	hybrid_geometric_model_3d should allow for topological elements
80	GER 80	Closed	mapping of draft_direction of directed_taper incomplete
81	GER 81	Closed	same requirements get mapped to differing places depending on the usage of S7
82	GER 82	Closed	product_requires_version wrongly coded
83	GER 83	Closed	mapping of dimension_callout to dimension_symbol
84	GER 84	Closed	product_definition_context / mapping of design_discipline_item_definition.is_relevant_for
85	GER 85	Closed	general_property structure required for definition of part properties
86	GER 86	Closed	identifiers of shape_representations
87	GER 87	Closed	document type property information for documents / specific classification of documents
88	GER 88	Closed	organization.type should be optional
89	GER 89	Closed	Harmonization of values with AP203
90	GER 90	Closed	date/org information for security classifications
91	GER 91	Closed	specifc item classification levels
92	GER 92	Closed	general classification of features / Classification of Work_request
93	GER 93	Closed	renaming work_request.status
94	GER 94	Closed	doc_element_select extended with activity_element
95	GER 95	Closed	AP 214 ARM, AO configuration.configuration_type, recommended values
96	GER 96	Closed	AP 214 ARM, AO specification_category, no hierarchy concept available
97	GER 97	Closed	Usage of application_protocol_definition
98	GER 98	Closed	Description of correspondence between effectivity_assigment.role and effectivity.secondary_definition incomplete
99	GER 99	Closed	Mismatch in AIM EXPRESS and EXPRESS-G
100	GER 100	Closed	introduce work definition as activity_type
101	GER 101	Closed	conformance classes of 214
102	GER 102	Closed	mapping of external model
103	GER 103	Closed	permissive list values missing
104	GER 104	Closed	permissive list required
105	GER 105	Closed	optional attribute missing

106	GER 106	Closed	attribute assembly_type to be optional
107	GER 107	Closed	definitions misleading, clarification needed for permissive list values
108	GER 108	Closed	The relevant address of a person needed
109	GER 109	Closed	wrong value in mapping rule
110	GER 110	Closed	wrong attribute type
111	GER 111	Closed	rename attribute and change mapping
112	GER 112	Closed	examples for permissive list values needed.
113	GER 113	Closed	use of official designators
114	GER 114	Closed	use of language codes instead of strings
115	GER 115	Closed	wrong path in mapping table
116	GER 116	Closed	wrong mapping for AE classification_attribute
117	GER 117	Closed	wrong reference path for AE general_classification_hierachy
118	GER 118	Closed	rename size_in_x and size_in_y to width and height.
119	GER 119	Closed	simultaneous_activity is a acitvity_relationship
120	GER 120	Closed	harmonize mapping table with AP212
121	GER 121	Closed	elements of select types missing
122	GER 122	Closed	harmonization with AP212 in the area of properties
123	GER 123	Closed	harmonize mapping in the effectivity area and work management area with the PDM schema.
124	GER 124	Closed	Clarification of tolerancing method
125	GER 125	Closed	differences in textual definitions of types of geometric tolerances
126	GER 126	Closed	Mapping change
127	GER 127	Closed	Shift attribute segment_size to common supertype geometric_tolerance.
128	GER 128	Closed	Rename application object circularity_tolerance
129	GER 129	Closed	Proposal for second method of tolerancing
130	GER 130	Closed	Change cardinality of assertions
131	GER 131	Closed	Missing type of tolerance
132	GER 132	Closed	truncated assertions and supertype tree in various conformance classes
133	GER 133	Closed	Include product_definition_formation in presented_item_select
134	GER 134	Closed	Request for contract related entities to be included in CC4
135	GER 135	Closed	context_dependent_over_riding_styled_item requested for CC4
136	USA 1	Closed	angular_size_dimension.full, dimensional_size.name
137	USA 2	Closed	dimensional_size, shape_aspect, geometric_dimension to value_with_unit
138	USA 3	Closed	Words transposed
139	USA 4	Closed	representation_item, geometric_dimension, global units, significant digits
140	USA 5	Closed	specific_item_classification is only applied to items
141	USA 6	Closed	'primary' application context needed
142	USA 7	Closed	mapping of item_instance in UoF S7 is not consistent with the mapping in S3
143	USA 8	Closed	document_type property applied to document representation is not at the proper level
144	USA 9	Closed	Mapping of shape_dependent_property to item_shape is incorrect
145	USA 10	Closed	The mapping of shape_dependent_property involves general_property_association and general_property. Why are they needed ?
146	USA 11	Closed	geometric validation property
147	USA 12	Closed	Renaming of "center of mass".

148	USA 13	Closed	Requirement for "surface area" information
149	USA 14	Closed	Requirement for "volume" information
150	USA 15	Closed	constraint defined within dimension_callout_relationship
151	USA 16	Closed	Error based on AIC504.
152	USA 17	Closed	Error based on AIC506.
153	USA 18	Closed	Conflict with AP202 approach
154	USA 19	Closed	Definition of view_volume
155	USA 20	Closed	Shape_aspect_associativity is too constrained in AP214
156	USA 21	Closed	Annotation_occurrence_associativity is too constrained in AP214
157	USA 22	Closed	The draughting_model_annotation_layers global rule is too restrictive
158	USA 23	Closed	Industry has identified the requirement to associate 3D notes to shape elements without leader lines.
159	USA 24	Closed	position_tolerance must have a datum
160	USA 25	Closed	simultaneous gaging requirement
161	JAP 1	Closed	quantified_instance , selected_instance
162	JAP 2	Closed	Alternative_solution
163	JAP 3	Closed	replaced_usage_relationship , effectivity
164	JAP 4	Closed	effectivity _ assignment
165	JAP 5	Closed	Retention_period
166	JAP 6	Closed	Property, Property_value
167	JAP 7	Closed	Shape_dependent_property
168	JAP 8	Closed	"planned_date , actual_date of AO ""approval"""
169	JAP 9	Closed	Full_model_change
170	JAP 10	Closed	design_discipline_item_definition
171	JAP 11	Closed	Application_context
172	JAP 12	Closed	document_format_property
173	JAP 13	Closed	ARM: document_assignment, AIM: applied_document_reference
174	JAP 14	Closed	item_definition_relationship
175	JAP 15	Closed	manufacturing_configuration (G11)
176	JAP 16	Closed	Configuration
177	JAP 17	Closed	Lack of AIM rules.
178	JAP 18	Closed	Lack of AIM rules.
179	JAP 19	Closed	Lack of AIM rules.
180	JAP 20	Closed	Lack of AIM rules.
181	JAP 21	Closed	Lack of AIM rules.
182	JAP 22	Closed	Lack of AIM rules.
183	JAP 23	Closed	Lack of AIM rules.
184	JAP 24	Closed	editorial mistake
185	JAP 25	Closed	lack of constraint
186	JAP 26	Closed	editorial mistake
187	JAP 27	Closed	mistake of attribute name
188	JAP 28	Closed	editorial mistake
189	JAP 29	Closed	lack of rules in mapping table
190	JAP 30	Closed	editorial mistake
191	JAP 31	Closed	editorial mistake

192	JAP 32	Closed	editorial mistake
193	JAP 33	Closed	default_setting
194	JAP 34	Closed	default_setting
195	JAP 35	Closed	default_setting
196	JAP 36	Closed	kinematic_pair,pair_type
197	JAP 37	Closed	ProsessPlan
198	JAP 38	Closed	ProcessPlan,Make_from_relationship
199	JAP 39	Closed	FormFeature,Rectangular_closed_pocket
200	JAP 40	Closed	ProcessPlan,Process_operation_relationship
201	JAP 41	Closed	ProcessPlan,Tool_part_relationship
202	JAP 42	Closed	FormFeature,Boss_feature
203	JAP 43	Closed	FormFeature,Boss_feature,sweep_path
204	JAP 44	Closed	FormFeature,boss_top
205	JAP 45	Closed	FormFeature,pocket_bottom
206	SWE 1	Closed	ARM requirement not met in AIM.
207	SWE 2	Closed	Attribute value problem
208	SWE 3	Closed	Attribut value problem.
209	SWE 4	Closed	Attribute value problem.
210	SWE 5	Closed	Redundant mapping cases.
211	SWE 6	Closed	Attribute value problem.
212	SWE 7	Closed	Redundant mapping cases.
213	SWE 8	Closed	Conformance Class Interoperability Problem
214	SWE 9	Closed	Redundant mapping cases
215	SWE 10	Closed	Redundant constraint in reference path
216	SWE 11	Closed	Incomplete reference path
217	SWE 12	Closed	Unnecessarily complex reference path
218	SWE 13	Closed	Missing attribute declaration
219	SWE 14	Closed	Missing mappings
220	SWE 15	Closed	Wrong AIM element
221	SWE 16	Closed	Mapping to a derived AIM attribute
222	SWE 17	Closed	Incomplete reference path
223	SWE 18	Closed	Wrong mapping target
224	SWE 19	Closed	Unnecessary mapping case
225	SWE 20	Closed	Unmapped requirement
226	SWE 21	Closed	Incomplete reference path
227	SWE 22	Closed	Incomplete reference path
228	SWE 23	Closed	Unnecessary mapping case
229	SWE 24	Closed	No value for mandatory AIM attribute
230	SWE 25	Closed	No value for mandatory AIM attribute
231	SWE 26	Closed	No value for mandatory AIM attribute
232	SWE 27	Closed	No value for mandatory AIM attribute
233	SWE 28	Closed	No value for mandatory AIM attribute
234	SWE 29	Closed	Missing mapping case label
235	SWE 30	Closed	Unnecessarily complex mapping of complex_product
236	SWE 31	Closed	No values for mandatory AIM attributes

237	SWE 32	Closed	Misleading structure of reference path
238	SWE 33	Closed	No value for mandatory AIM attribute
239	SWE 34	Closed	Missing mapping case
240	SWE 35	Closed	Redundant reference path
241	SWE 36	Closed	Mapping to a derived AIM attribute
242	SWE 37	Closed	No values for mandatory AIM attributes
243	SWE 38	Closed	No values for mandatory AIM attributes
244	SWE 39	Closed	Missing application objects in mapping table
245	SWE 40	Closed	No value for mandatory AIM attribute
246	SWE 41	Closed	Mapping case definitions not useful
247	SWE 42	Closed	No values for mandatory AIM attributes
248	SWE 43	Closed	No values for mandatory AIM attributes
249	SWE 44	Closed	Missing mapping case label
250	SWE 45	Closed	Missing mapping case label
251	SWE 46	Closed	No values for mandatory AIM attributes
252	SWE 47	Closed	Missing mapping cases?
253	SWE 48	Closed	Misspelling, wrong reference in mapping table.
254	SWE 49	Closed	Misspelling, wrong reference in mapping table.
255	SWE 50	Closed	Missing constrains in referens path
256	SWE 51	Closed	Redundant mapping cases
257	SWE 52	Closed	Property type attribute walue is wrong
258	SWE 53	Closed	Missing relationship
259	SWE 54	Closed	Include product_class to the product_function_component_select.
260	SWE 55	Closed	Configured_element needs to be associated to 'class_structure_relationship' and 'product_structure_relationship'
261	SWE 56	Closed	"The values for configuration_type; 'design' and 'usage' are difficult to apply, when the values applies to different associated entities"
262	SWE 57	Closed	A specification_expression containing an OR expression, cannot be included with any kind of automatic mechanism
263	SWE 58	Closed	The value 'Precedence' for relation_type does not give the impression of 'priority' between different activity objects
264	SWE 59	Closed	The value 'decomposition' and 'hierarchy' seams to define the same type of relationship
265	SWE 60	Closed	There are a number of values for the activity_type, but no one to define an activity for co-ordination of sub activities
266	SWE 61	Closed	The definition of relation_type is too scant.
267	SWE 62	Closed	The formulation in the example is not accurate, the statements 'start of production' and 'end of production' may be interpreted in many different ways
268	SWE 63	Closed	The definition of the meaning of the 'non replaceable standard' value is ambiguous.
269	SWE 64	Closed	The relationships between operations should be dependent of the combination of 4.2.375 Process_plan and 4.2.371 Process_operation.
270	SWE 65	Closed	The assignment of resources should be dependent of the combination of 4.2.375 Process_plan and 4.2.371 Process_operation.
271	FRA 1	Closed	convention for effectivity
272	FRA 2	Closed	definition of the attribute of effectivity should be amended

273	FRA 3	Closed	constraints regarding the possible effectivity objects associated with objects are unclear
274	FRA 4	Closed	The definition of the association_type ""availability"" in class_specification_association is ambiguous
275	FRA 5	Closed	redundant ways to describe the occurrence of a component in an assembly
276	FRA 6	Closed	no predefined value proposed or even applicable for the class_condition_association.condition_type
277	FRA 7	Closed	attribute in class_specification_association missing
278	FRA 8	Closed	occurrence of product_component or product_function
279	FRA 9	Closed	definition of Value_range not correct
280	FRA 10	Closed	The definition of classification_system does not correspond to what this object actually identifies
281	FRA 11	Closed	Amend the definition for document_source_property
282	FRA 12	Closed	Contexts for objects referenced by assembly_relationship
283	FRA 13	Closed	The meaning of the case where effectivity.concerned_organization is an empty set is not clear
284	FRA 14	Closed	The entity effectivity has an attribute concerned_organization whereas manufacturing_configuration has not
285	FRA 15	Closed	As the attribute model_extent defines a radius, i.e. a length measure, the value of the radius should be expressed with a length_unit
286	FRA 16	Closed	geometric_or_external_model_select, shape_definition_select Select types are identical.
287	FRA 17	Closed	mapping of manufacturing_configuration.is_solution_for when this attribute refers to product_identification or to item_version.
288	FRA 18	Closed	make_from_relationship is the only kind of item_definition_relationship that has an attribute Name
289	FRA 19	Closed	The AO process_operation_input_or_output should not have an attribute Quantity
290	FRA 20	Closed	sentence in the definition of process_operation_input_or_output.placement is incorrect
291	FRA 21	Closed	attribute address should not be in the AO person but in the AO person_in_organization
292	FRA 22	Closed	The reference path of the mapping of item_instance_relationship.relating is incorrect in some cases
293	FRA 23	Closed	definition of the attribute replaced_usage_relationship.usage_context does not specify any restriction about the context
294	FRA 24	Closed	Mapping of item_instance_relationship.related
295	FRA 25	Closed	problem with replaced_usage_relationship.usage_context when it refers to an item_definition_instance_relationship
296	FRA 26	Closed	the fact a SET is used for surface_condition.described_elements is not consistent with similar entities like item_property_association and process_property_association
297	FRA 27	Closed	second sentence of the definition of item_instance is wrong
298	FRA 28	Closed	mapping of item_instance is not satisfactory
299	FRA 29	Closed	definition of particular subtypes of item_instance is not useful
300	FRA 30	Closed	definition of the attribute selected_quantity is not satisfactory
301	FRA 31	Closed	first sentence of the definition of selected_instance is not satisfactory
302	FRA 32	Closed	attribute should only be Optional

303	FRA 33	Closed	cardinality of the inverse relationship is wrong as a document_file cannot have several formats.
304	FRA 34	Closed	cardinality of the inverse relationship is wrong as the final version of a document_file cannot have been created by several systems
305	FRA 35	Closed	cardinality of the inverse relationship is wrong as the text definition of document_content_property makes that assigning several content_property to a document_file has no sense.
306	FRA 36	Closed	cardinality of the inverse relationship is wrong as the final version of a document_file cannot have several sizes
307	FRA 37	Closed	document_file may have several document_source_property objects that refer to it
308	FRA 38	Closed	cardinality of the inverse relationship is wrong
309	FRA 39	Closed	cardinality of the inverse relationship is wrong
310	FRA 40	Closed	cardinality of the inverse relationship is wrong
311	FRA 41	Closed	cardinality of the inverse relationship is wrong
312	FRA 42	Closed	document_representation may have several document_source_property objects that refer to it
313	FRA 43	Closed	attribute real_world_scale should not be of type value_with_unit
314	FRA 44	Closed	attribute referenced_standard should refer to a classification_system
315	FRA 45	Closed	predefined value of classification_type
316	FRA 46	Closed	document specific properties have, almost all, no sense for a physical_model
317	FRA 47	Closed	Change of process_operation_resource_assignment.operation
318	FRA 48	Closed	Document_type_property.is_applied_to should not be assigned at the level of a representation
319	FRA 49	Closed	capability to assign a document_type_property to a Document_representation seems redundant
320	FRA 50	Closed	definition of the inherited attribute version_id is ambiguous
321	FRA 51	Closed	definition of the inherited attribute version_id is ambiguous
322	FRA 52	Closed	assembly_definition.assembly_type attribute should be made Optional
323	FRA 53	Closed	collection_definition.purpose attribute should be made Optional.
324	FRA 54	Closed	Mapping of physical_instance.
325	FRA 55	Closed	Simultaneous_activity, simultaneous_process_operation to be replaced by instances of activity_relationship
326	FRA 56	Closed	attribute ordered_price should be replaced by an attribute .description
327	FRA 57	Closed	type of role attribute of organization_in_contract
328	FRA 58	Closed	named_size as a subtype of rectangular_size
329	FRA 59	Closed	Document_content_property, String_with_language: The way a language is specified is not the same
330	FRA 60	Closed	one of the two mapping cases proposed for item_version is unclear
331	FRA 61	Closed	Hybrid_geometric_model_3d in UoFs not adequately assigned
332	FRA 62	Closed	modeling of the object Classification_attribute is not satisfactory
333	FRA 63	Closed	right attributes should be assigned in the example
334	FRA 64	Closed	Definition of item_version should be completed concerning /NULL value
335	FRA 65	Closed	specific_item_classification badly modeled
336	FRA 66	Closed	Classification_association: change of definition
337	FRA 67	Closed	Classification_association: not clear what the consequences of a value True for definitional are

338	FRA 68	Closed	effectivity_assignment: it is not possible to specify when replacement has become effective
339	FRA 69	Closed	Information on successor of a person needed.
340	FRA 70	Closed	geometric_model: The reference path of both the application object and its attribute version_id are partly inconsistent, redundant and wrong
341	FRA 71	Closed	external_model: The mapping of is_defined_as is not satisfactory
342	FRA 72	Closed	string_with_language: Inverse constraint should constraint
343	FRA 73	Closed	item_instance_relationship: mapping is not satisfactory
344	FRA 74	Closed	document_assignment: approach taken in the AIM raise several issues
345	FRA 75	Closed	document_assignment: dummy document should be avoided
346	FRA 76	Closed	effectivity_assignment: It is unclear whether a product datum that has no effectivity assigned for a given date is effective or not
347	FRA 77	Closed	effectivity_assignment: there is no explicit way to specify that a product datum is not effective
348	FRA 78	Closed	item_instance: expression should be replaced
349	FRA 79	Closed	WOrd misspelled.
350	FRA 80	Closed	item: constraint has no corresponding constraint in the AIM
351	FRA 81	Closed	item_version: mapping case unclear.
352	FRA 82	Closed	physical_instance: useless portion of the reference path
353	FRA 83	Closed	physical_instance: mapping of serial number
354	FRA 84	Closed	Clarification in textual definition needed.
355	FRA 85	Closed	product_class: mapping unclear
356	FRA 86	Closed	mapping does not conform to the semantics of entity in Part 44
357	FRA 87	Closed	specified_item: Usage of attribute unclear.
358	FRA 88	Closed	Inconsistency between ARM and AIM
359	FRA 89	Closed	document_type_property: redundant appearance
360	FRA 90	Closed	document_source_property: mapping not satisfactory
361	FRA 91	Closed	multi_language_string: Wrong mapping cases
362	FRA 92	Closed	item_instance: inconsistent mapping
363	FRA 93	Closed	Definition for the "condition" attribute of process_operation_relationship entity
364	FRA 94	Closed	Wrong text in figure
365	FRA 95	Closed	AP214 is not strictly limited to mechanical parts nor to automotive products.
366	USA 26	Closed	
367	USA 27	Closed	
368	USA 28	Closed	mapping constraint on next_assembly_usage_occurrence.name
369	USA 29	Closed	
370	USA 30	Closed	
371	UK 1	Closed	statement on containing geometric representation of points curves and of the wireframe_model_3D (G2) and the geometrically_bounded_surface_model (G8) is very misleading
372	UK 2	Closed	including the Hybrid_geometric_model in UoF G4 (also in G3, G5)
373	UK 3	Closed	inclusion of the Constructive_geometric_element and related objects in Geometric UoFs
374	UK 4	Closed	inclusion of composite_surface objects in G8

375	UK 5	Closed	definitions in annex should be brought up to date with the latest available versions of IR's
376	UK 6	Closed	Definition of Scope and included uoF Scope
377	UK 7	Closed	units and values in S1
378	UK 8	Closed	UoF contains a number of AO that are geometry based rather than external references
379	UK 9	Closed	more generic method of defining what the property needed
380	UK 10	Closed	scope description should be amended
381	UK 11	Closed	mapping provided for the general case of a `mixed' topologically_connected_set containing both edges and faces
382	UK 12	Closed	The normative reference to part 42 should be to the latest Revision 1 document not to 1994 edition.

4 Issues

Originator:	Gisela Schulze, VW, gisela.schulze@volkswagen.de	**Date:**	26.08.1999
Country No.:	GER-1	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	122
Related Part/UoF:	S6	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

definition of Classification_attribute should be improved

Issue Description:

The definition of Classification_attribute should not refer to Item, because meanwhile general_classification may be associated to a lot of entities.

Proposed Solutions/Remarks:

A Classification_attribute is a characteristic used to classify an object associated with the corresponding General_classification (see ...)

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
==
accepted, as proposed

Incorporated Solutions:

done as proposted.

Originator:	Gisela Schulze, VW, gisela.schulze@volkswagen.de	**Date:**	26.08.1999
Country No.:	GER-2	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	153
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

definition of Date_and_person_assignment.role is not correct

Issue Description:

The definition of 'update' contains the information ... date or time, but should contain date and time

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

accepted, change "date or time" to "date and time" in the whole clause 4.2.115 (2 times)

Incorporated Solutions:

done as proposted.

Issue Reference No.: 3

Originator:	Gisela Schulze, VW, gisela.schulze@volkswagen.de	**Date:**	26.08.1999
Country No.:	GER-3	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	e.g. 75, 91, 270, ...
Related Part/UoF:		**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

general editorial issue

Issue Description:

In all cases where the application assertion (4.3...) contains the information 'refers to zero or one...', the sentence 'If present, there shall be exactly one object that ...' should be added. Currently this sentence seems to be added by chance.

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Check algorithm in the tool which produces the textual references.

Incorporated Solutions:

The case is in fact not covered by the supplementary directives. The issue deals with the difference between cases, where an assertion is made including a select type (here the additional sentence "If present, ..." or similar sentences occur) in contrast to assertions that are not established by a select (here the sentence is absent). The difference is that from reading the assertions it is not clear in the first case that only one of the elements can be choosen, because it is only stated that the application object refers to ,e.g., zero or one of each type, but not made clear except for the sentence discussed here that in in total exactly one object is refered to.

Issue Reference No.: 4

Originator:	Gisela Schulze, VW, gisela.schulze@volkswagen.de	**Date:**	27.08.1999
Country No.:	GER-4	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	116
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

improve definition of class_condition_association

Issue Description:

The second sentence of the definition (This association includes the information that a particular Specification_expression is valid for all products of that Product_class) is not correct if condition_type = part-usage. Example: Product_class = VW Golf, Specification_expression = left-hand steering and 4-wheel-drive; the specification_expression is not valid for all products of the Product_class VW Golf, but is used to indicate that certain parts are used to produce a VW Golf with left-hand steering and 4-wheel-drive.

Proposed Solutions/Remarks:
Discussed Solutions:

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===

delete second sentence of definition of AO

Add in definition of Attribute condition_type, that is is valid for all products of the associated product class in clase of "validity" and "identification"

Incorporated Solutions:

done as proposted.

Issue Reference No.: 5

Originator:	Gisela Schulze, VW, gisela.schulze@volkswagen.de	**Date:**	27.08.1999
Country No.:	GER-5	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1304, 1326, 1353, 1386
Related Part/UoF:	S1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

duplicate assertions in mapping tables

Issue Description:

There are duplicate assertions in the mapping tables of some apllication objects. Approval #3/#6, #4/#5

Date_and_person_assignment #8/#11, #9/#10 Date_time_assignment #5/#8, #6/#7

Person_organisation_assignment #7/#11, #6/#12

Proposed Solutions/Remarks:

Remove the duplicate assertions.

Discussed Solutions:

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===

Addressed by solution to issue #212

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 6

Originator:	Gisela Schulze, VW, gisela.schulze@volkswagen.de	**Date:**	27.08.1999
Country No.:	GER-6	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1376
Related Part/UoF:	S1	**Clause:**	Cl. 5.1 (Mapping tables) ,

Sentence/abstract/keywords:

mapping of Design_discipline_item_definition not clear

Issue Description:

The reference path contains application_context_element.name = 'part definition'. Does that mean that ddid is available only for items classified as parts? If ddid is available for other types of item (tool, raw material) the attribute application_context_element.name = 'item definition' should be used.

Proposed Solutions/Remarks:

Check the usage of 'part.definition' in the mapping tables generally (e.g. Item_definition_relationship, Item_instance, ...)

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision: issue rejected.

Harmonized 'AIM terminology' is used consistently ('part' instead of 'item').

Incorporated Solutions:

not incorporated, since issue was rejected

Issue Reference No.: 7

Originator:	Gisela Schulze, VW, gisela.schulze@volkswagen.de	**Date:**	27.08.1999
Country No.:	GER-7	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1431
Related Part/UoF:	S1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Assertion and mapping missing?

Issue Description:

The mapping of Value_list contains the assertion ""if the unit is assigned globally"", but no assertion and no mapping for the general case.

Proposed Solutions/Remarks:

check mapping of Value_list

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Clarification: Problem of complete OR case documentation.

Decision: improve or case documentation:

#1: If the value is a nominal_value and with a local unit

#2: If the value is a value_limit and with a local unit

#3: if the value is a nominal_value or a value_limit and unit assigned globally

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 8

Originator:	Gisela Schulze, VW, gisela.schulze@volkswagen.de	**Date:**	27.08.1999
Country No.:	GER-8	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1481
Related Part/UoF:	S3	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Note not necessary?

Issue Description:

The mapping table of Assembly_definition refers to Note 2 (In this case, it is assumed that the inherited attribute ddid.name is not instantiated). The attributes assembly_definition.assembly_type and ddid.name are mapped to different attributes of product_definition.

Proposed Solutions/Remarks:

check if note is needed

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision:

Check, if note can be deleted

Incorporated Solutions:

note included in mapping of assembly_definition.assembly_type because of conflict with mapping of other design_discipline_item_definition subtypes :

If assembly_definition is also of type collection_definition and/or mating_definition, it is assumed, that only one of the attributes collection_definition.purpose, assembly_definition.assembly_type, or mating_definition.mating_type is instantiated

Issue Reference No.: 9

Originator:	Gisela Schulze, VW, gisela.schulze@volkswagen.de	**Date:**	27.08.1999
Country No.:	GER-9	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1679, 1687, 1303, 1658
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

different values for association_type, relation_type, application_context, ... in definition and mapping table

Issue Description:

1. The definition of Item_function_association.association_type contains the values 'realization' and 'additional functionality', the mapping table contains the values 'realization' and 'required functionality'

2. The definition of Product_class_relationship:relation_type contains the values 'derivation', 'hierarchy', 'version sequence', the mapping table contains the values 'alias', decomposition', derivation', substitution'

3. The definition of Application_context.application_domain and Application_context.life_cycle_stage does not contain a list of values, the mapping table contains some values .

4. The definition of Class_specification_association.association_type contains the value 'part usage', the mapping table does not contain this value.b

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision: Change mapping table to be consistent with the values defined in ARM permissive lists

Incorporated Solutions:

Mapping rules of attribute values have been made consistent with permissive list values in ARM.

Issue Reference No.: 10

Originator:	Friedrich Elsässer, EDS, friedrich.elsaesser@europe.eds.com	**Date:**	08.09.1999
Country No.:	GER-10	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	FF2	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Name of attribute orientation of thread_feature

Issue Description:

To be consistent with similiar position definitions the name of the attribute orientation of the application object thread_feature should change to location_and_orientation.

Proposed Solutions/Remarks:

Do as proposed.

Discussed Solutions:

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===

Do as proposed.

Incorporated Solutions:

done as proposted.

Issue Reference No.: 11

Originator:	Juergen Mohrmann	**Date:**	22.03.1998
Country No.:	GER-11	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	G_1-8	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Typo in constructive_geometry_association.auxiluary_geometry

Issue Description:

Attribute auxiluary_geometry of Application Object constructive_geometry_association is misspelled.

Proposed Solutions/Remarks:

Correct spelling to auxiliary_geometry in clause 4.2, Annex G (G.42) and the corresponding mapping table entry in clause 5.1.

Discussed Solutions:

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===

Do as proposed.

Incorporated Solutions:

done as proposted.

Issue Reference No.: 12

Originator:	Juergen Mohrmann	**Date:**	04.11.1998
Country No.:	GER-12	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) , Clause_5.2

Sentence/abstract/keywords:

Add mapping rule for operator = 'implication' at mapping of specification inclusion.

Issue Description:

In the AIM Rule 86 the values of conditional_operator are restricted. One of the values is 'implication'. This value is not mentioned anywhere in the mapping tables, but should be included in a mapping rule for clarification.

Proposed Solutions/Remarks:

At the mapping of specification_inclusion.if_condition include a mapping rule enforcing the setting of conditional_operator.name = 'implication' for clarification.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision: Include mapping rule as proposed.

Incorporated Solutions:

Mapping rule conditional_operator.name = 'implication' has been included in the mapping of specification_inclusion.

Issue Reference No.: 13

Originator:	Juergen Mohrmann	**Date:**	04.11.1998
Country No.:	GER-13	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) , Clause_5.2

Sentence/abstract/keywords:

Sentence/abstract/keywords: Mapping of product_structure_relationshp to product_definition_usage

Issue Description:

The AO product_structure_relationship is currently mapped to product_definition_relationship. Because of the special product structure semantics a mapping to product_definition_usage fits semantically better.

Proposed Solutions/Remarks:

Map product_structure_relationship to product_definition_usage.

Discussed Solutions:

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===

Decision: Change mapping as proposed.

Incorporated Solutions:

product_structure_relationship mapping has been changed to product_definition_usage.

Issue Reference No.: 14

Originator:	Juergen Mohrmann	**Date:**	04.11.1998
Country No.:	GER-14	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	P1	**Clause:**	Cl. 5.1 (Mapping tables) , Clause_5.2

Sentence/abstract/keywords:

Simplify mapping of context_dependent_appearance_assignment to group, layer on basis of Part 46 TC1.

Issue Description:

Context_dependent_appearance_assignment.appearance_context to layer, group is mapped very complicated with a dummy intermediate presentation_representation instance in the case of layer.

Proposed Solutions/Remarks:

Map the two assertions with the following reference paths more directly on basis of Part 46 TC1 (extended style_context_select): context_dependent_appearance_assignment to layer (as appearance_context): presentation_style_by_context presentation_style_by_context.style_context -> style_context_select style_context_select = presentation_layer_assignment and context_dependent_appearance_assignment to group

(as appearance_context): presentation_style_by_context presentation_style_by_context.style_context -> style_context_select style_context_select = group #1:(group) #2:(group => rep_item_group)

Discussed Solutions:

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===

Do as proposed.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 15

Originator:	Juergen Mohrmann	**Date:**	04.11.1998
Country No.:	GER-15	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 5.1 (Mapping tables) , Clause_5.2

Sentence/abstract/keywords:

Map Specific_item_classification.classification_type to product_related_product_category.

Issue Description:

Specific_item_classification.classification_name is currently mapped to that the 'sub_category' for specific_classification.classification_type is also mapped to a product_related_product_category in order to associate products to the lower level product_categories. This is not enforced by the current mapping table where the classification_type attribute is mapped to a 'lower level' product_category only, not its subtype.

Proposed Solutions/Remarks:

Include the following mapping rule ... {product_category => product_related_product_category} ... in the reference path of specific_item_classification.classification_type for clarification of the requirements.

Discussed Solutions:

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===

Adressed by solution to #91/#335 (ARM change on specific_item_classification)

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 16

Originator:	Juergen Mohrmann	**Date:**	05.11.1998
Country No.:	GER-16	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	FF1	**Clause:**	Cl. 5.1 (Mapping tables) , Clause_5.2

Sentence/abstract/keywords:

Map Feature_parameter.parameter_name (opt) to applied_identification_assignment rather than name_assignment.

Issue Description:

Name_assignment has a very special meaning in STEP part 41 and should be avoided wherever possible. For the optional attribute parameter_name of Feature_parameter, currently applied_name_assingment is used for the mapping, since the General_feature_parameter.parameter_role maps to representation_item.name already consistently. This is in fact an alternate local identification of the feature_parameter at the AO.

Proposed Solutions/Remarks:

Change the mapping from applied_name_assignment to applied_identification_assignment with an appropriate role.

Discussed Solutions:

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===
Do as proposed.

See picture.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 17

Originator:	Helmut Kockelke	**Date:**	04.01.1999
Country No.:	GER-17	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) , Clause_5.2

Sentence/abstract/keywords:

Mapping path of class_condition_association to specification_expression is unclear.

Issue Description:

Mapping path of class_condition_association to specification_expression with mapping rule {product_concept_feature.name = 'expression'} is unclear, the indication of the subtype conditional_concept_feature should be sufficient.

ISO/DIS 10303-214 – Issue log

Proposed Solutions/Remarks:

Remove indictated mapping rule.

Discussed Solutions:

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===

Decision:

1. Remove mapping rule from class_condition_association

2. include mapping rule at specification_expression: product_concept_feature.name = 'specification expression'

3. include mapping rule at specification_inclusion: product_concept_feature.name = 'specification inclusion'

Incorporated Solutions:

Indicated mapping rule in mapping path of class_condition_association to specification_expression removed.

Issue Reference No.: 18

Originator:	Helmut Kockelke	**Date:**	04.01.1999
Country No.:	GER-18	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1621
Related Part/UoF:	S1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Mapping of #1 general case is unclear.

Issue Description:

The reference path for #1: The general case should be extended by a relationship between date and person not just the mapping to an AND case. Therefore it is unclear, if the date is assigned to the organization_assignment or the organization is assigned to the date_assignment.

Proposed Solutions/Remarks:

Add in the reference path column at the beginning the following entries for case #1: #1:{#3:(calendar_date <= date <- date_assignment.assigned_date date_assignment => applied_date_assignment applied_date_assignment.items[i] -> date_item #6:(date_item = applied_person_and_organization_assignment applied_person_and_organization_assignment <= person_and_organization_assignment person_and_organization_assignment.assigned_person_and_organization -> person_and_organization) #7:(date_item = applied_organization_assignment applied_organization_assignment <= organization_assignment organization_assignment.assigned_organization -> organization)) #4:(date_and_time <- date_and_time_assignment.assigned_date_and_time date_and_time_assignment => applied_date_and_time_assignment applied_date_and_time_assignment.items[i] -> date_and_time_item #6:(date_and_time_item = applied_person_and_organization_assignment applied_person_and_organization_assignment <= person_and_organization_assignment person_and_organization_assignment.assigned_person_and_organization -> person_and_organization) #7:(date_and_time_item = applied_organization_assignment applied_organization_assignment <=

organization_assignment organization_assignment.assigned_organization -> organization))}

#2:{approval_person_organization ...

Discussed Solutions:

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==

Problem of complete OR case documentation.

Decision:

Replace current AND mapping by simple OR cases, only:

  (person_and_organization)

      (organization)

(approval_person_organization)

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 19

Originator:	Jens Kuebler	**Date:**	11.02.1999
Country No.:	GER-19	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Explanatory text in Mapping table refers to 'first' element in a set.

Issue Description:

For OR cases #1 and #2 of the mapping of multi_language_string and string_with_language there there are the following explanation: #1: For the first element in the SET of ... language_dependent_string #2: For any other element in that SET. For a SET the 'first' element is not really defined.

Proposed Solutions/Remarks:

Replace the explanatory text for OR cases #1 and #2 at the mapping of string_with_language and multi_language_string with the following: #1: For one element inthe SET of ... language_dependent_string. #2: For any further element in that SET, if the number of elements is > 1.

Discussed Solutions:

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Decision:

1. use

#1: for the primary string_with_language

#2: for any other string_with_language

2. add in 4.2 a constraint: string_with_language.primary: exactly one 'primary' string_with_language shall be allowed in the SET.

3. ARM change as follows: 2 attributes in the ARM:

primary_language_dependent_string

additional_language_dependent_string

4. Add a kind of INVERSE in 4.2/4.3: write a rule that it has to be used by at least one primary or secondary.

No INV possible, have to write a rule that a language_dependent_string has to be used by at least one multi_language_string as primary or secondary.

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 20

Originator:	Helmut Kockelke	**Date:**	08.03.1999
Country No.:	GER-20	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	P1	**Clause:**	Cl. 5.1 (Mapping tables) , Clause_6

Sentence/abstract/keywords:

camera_model_d3_with_hlhsr missing in CC04.

Issue Description:

AP202 allows for camera_model_d3_with_hlhsr. Since AP214 CC04 should be a superset of AP202 this entitiy should also occur in CC04. Through the ARM structure this entitiy is currently only included in CCs with UoF P3, i.e. CC05, CC18-20.

Proposed Solutions/Remarks:

Allow the OR case #8: 'If hidden element handling is required' also for UoFs with P1, P2 (not only, if P3 is present) in order to include camera_model_d3_with_hlhsr at the mapping of model_image.view_volume_placement in CC04.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Solved by solution of #101.

Incorporated Solutions:

no action required. solved by #101.

Issue Reference No.: 21

Originator:	Jürgen Mohrmann (Dr. Haas)	**Date:**	22.03.1999
Country No.:	GER-21	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	P2	**Clause:**	Cl. 5.1 (Mapping tables) , Clause_5.2

Sentence/abstract/keywords:

Select_type group_item is incomplete (styled_item, draughting_callout missing).

Issue Description:

AP202 allows for annotation_occurrence as a group_item. In AP214 according to the ARM the allowed elements in a group are of type detailed_element. Detailed_element maps for UoF P2 to an or case of #1: styled_item or #2: draughting_callout. However, neither of these AIM entities are included in the select_type group_item in the longform.

Proposed Solutions/Remarks:

Include styled_item in group_item in the longform and in the corresponding CC schemas (including UoF P2). Inclusion of draughting_callout is not necessary, since it is a subtype of geometric_representation_item that is already included in group_item. With this extension annotation_occurrence (as in AP202) will also be allowed as a group_item, since it is a subtype of styled_item.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
==
Map group.element to an OR case of geometric_representation_item, mapped_item, topological_representation_item and styled_item in order to reflect the different cases detailed_element is mapped to.
In that case annotation_occurence is a member of items, since it is a subtype of styled_item.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 22

Originator:	Jens Kuebler	**Date:**	09.04.1999
Country No.:	GER-22	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	PR1	**Clause:**	Cl. 4.2 (ARM) Cl. 5.1 (Mapping tables) ,

Sentence/abstract/keywords:

Permissive list of values for the attribute 'value_determination', cf. 4.2.399.4

Issue Description:

Especially in the situation that Property_values are used in the context of a Classification_attribute (assertion via 'attribute_value'), we would like to use the 'value_determination' attribute to denote that a Property_value in the SET of Classification_attribute.attribute_value is the default value. For example, in SAP R/3 it is a possible to specify that a Property_value should be used as the default in a given Classification_- attribute's context, and it seems appropriate to encode this information in the AP214 population.

Proposed Solutions/Remarks:

Add the following item to the itemized list in 4.2.399.4 ""- 'default': The value represents a default value.

Discussed Solutions:

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===
Decision:

Permissive list value 'typical' at property_value_representation.qualifier fulfills the requirement.

Incorporated Solutions:

not incorporated, since issue was rejected

Issue Reference No.: 23

Originator:	Jens Kuebler	**Date:**	09.04.1999
Country No.:	GER-23	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S6	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Mapping of the assertion 'Classification_attribute to property_value (as attribute_value)

Issue Description:

From the ARM requirements it can be observed that in case a Classification_attribute has one or more Property_values as attribute_value, these Property_values require the instantiation of a Property (mandatory attribute Property_value.definition). The issue will be discussed for the case of a General_property, however, all other types of Propertys may also occur. There is a correspondence between the Classification_attribute (which maps to property_definition) and the General_property (mapped to general_property. Note that for other Propertys than General_property, there is always also a general_property being instantiated). We propose to enforce this correspondence by adding a 'general_property_association' which directly connects a property_definition and the corresponding general_property, thus making this correspondence explicit. Note that this would also imply that the general_property.name (ARM: General_property.property_type) has to be identical to the property_definition.name (ARM: Classification_attribute.id) due to general_property_association.wr2

Proposed Solutions/Remarks:

Change the indicated mapping as follows: ""property_definition [represented_definition = property_definition represented_definition <- property_definition_representation.definition property_defintiion_representation {property_definition_representation.name = 'attribute name'} property_definition_representation.used_representation ->] [derived_property_select = property_definition derived_property_select <- general_property_association.derived_definition general_property_association {general_property_association.name = 'property attribute'} general_property_association.base_definition -> general_property represented_definition = general_property represented_definition property_definition_representation.definition -> property_definition_representation property_definition_representation.used_representation ->] representation {representation.name = 'property value'}"" ALTERNATE SOLUTION: In addition to the above, it might be considered to enforce the correspondence between Classification_attribute and Property even more by requiring the instantiation of a Property together with a Classification_attribute. This would mean that in the ARM, Classification_attribute should have an additional mandatory attribute (christianed, e.g., "".property""). As a consequence, the instantiation of a Property would become mandatory even for Classification_attributes that do not have attribute_values. The benefit is that the Property allows to further describe the Classification_attribute, for example, the units to use.

Discussed Solutions:

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===
Addressed by solution to issue #25 (ARM modification)

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 24

Originator:	Jens Kuebler	**Date:**	09.04.1999
Country No.:	GER-24	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

SELECT approval_element_select

Issue Description:

The data described by the ARM entities 'General_classification' and 'Classification_association' may be subject to approval. For example, in SAP R/3 it is possible to denote that a Classification_association is incomplete ('under development') or disabled. The same applies for a General_classification.

Proposed Solutions/Remarks:

Add 'General_classification' and 'Classifictaion_association' to the approval_element_select.

Discussed Solutions:

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accepted

Incorporated Solutions:

done as proposed.

Issue Reference No.: 25

Originator:	Jens Kuebler	**Date:**	09.04.1999
Country No.:	GER-25	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S6	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Classification_attribute_relationship is required.

Issue Description:

A mechanism is required to establish a relationship between Classification_attributes. The examples below are taken from the SAP R/3 system, where the described constructs are actually present and in use. (1) In R/3 there is the possibility to define 'complex' classification_- attributes. They collect several other, 'simple' classification_attributes. For example, a complex attribute might be 'fuel economy', which might collect the simple attributes 'city l/100 km', 'country l/100 km', 'highway l/100 km', and 'fuel type (unleaded 91/unleaded 98/gasoline)'. The complex attribute is then adressed as a whole and assigned to a General_classification. (2) In R/3, the order of Classification_attributes that belong to a General_classification is significant for the evaluation of expressions (for example, as the result of the evaluation of such an expression, an action might be taken to set the value of another Classification_attribute to a given value). In complex, but real-world applications this has the effect that a re-arrangement of the Classification_attributes in a General_classification might change the overall application semantics. As the General_classification has a SET of Classifictaion_attributes, it is not possible to preserve this order when encoding R/3 data in STEP.

Proposed Solutions/Remarks:

Both problems can be adressed by introducing a new entity 'Classification_attribute_relationship', which may be described as follows: ""4.2.x Classification_attribute_relationship A Classification_attribute_relationship is a relationship between two Classification_attribute (see...) objects EXAMPLE.
Classification_attribute_relationship may be used to indicate that two or more Classification_attributes shall be treated as a group The data associated with a Classification_attribute_relationship are the following: - description - related - relating - relation_type [... Auto-generated text for description (OPTIONAL), related, relating ...]
4.2.xxx.4 relation_type The relation_type specifies the meaning of the relationship. Where applicable, the following values shall be used: - 'peer' : The related Classification_attribute shall not be used without the relating Classification_attribute, and vice versa. - 'sequence' : Whenever an order is established on a set of Classification_attribute that encloses both the relating and the related Classification_attribute, the relating

Classification_attribute should appear before the related Classification_attribute."" Clause 5.1 The Classification_attribute_relationship could be easily mapped using a property_definition_relationship. The details are left to the AP developers. ----

Discussed Solutions:

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==

partially accepted. Do not include a relationship between classification_attributes, could be partially managed by property_relationship

Incorporated Solutions:

added note in attribute 'attribute_definition'

Issue Reference No.: 26

Originator:	Jens Kuebler	**Date:**	14.04.1999
Country No.:	GER-26	**Issue status:**	Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

restrict_multi_language_* RULEs are faulty

Issue Description:

In, for example, the rule ""restrict_multi_language_for_group""'s WR3, non-existing attributes '.language' of the ENTITYs multi_language_attribute_assignment and attribute_language_- assignment are used. This seems also to affect many or all other of the ""restrict_multi_language_for_something"" RULEs.

Proposed Solutions/Remarks:

A comfortable solution would be to introduce the attributes as DERIVED, because they are really very important. This would mean that the following additons would have to be made: -- ENTITY attribute_language_assignment DERIVE language : label := SELF\attribute_classification_assignment. assigned_classification.name; -- ENTITY multi_language_attribute_assignment DERIVE language : label := get_multi_language(SELF); FUNCTION get_multi_language(x : multi_language_attribute_assignment) : label; LOCAL alas : BAG OF attribute_language_assignment := USEDIN(x, 'AUTOMOTIVE_DESIGN.ATTRIBUTE_LANGUAGE_ASSIGNMENT.ITEMS'); -- note: sizeof(alas) has to be 1 due to -- multi_language_attribute_assignment.wr2 END_LOCAL; IF SIZEOF(alas) > 0 THEN RETURN(alas[1].language); END_IF; RETURN (?); END_FUNCTION; -- get_multi_language ALTERNATE SOLUTION: Alternatively one could change all affected rules by replacing '.language' by '\attribute_classification_assignment. assigned_classification.name' in the case of the attribute_- language_assignments, and in the case of the multi_language_attribute_- assignment, replace it by the corresponding (several A4 pages) expressions... ----

Discussed Solutions:

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Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 27

Originator:	Achim Hospach	**Date:**	01.04.1999
Country No.:	GER-27	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:		**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

WR10 of applied_date_assignment and applied_date_and_time_assignment has a bug.

Issue Description:

Textual definition of WR10: WR10: If the name of the role ist not one of 'actual end' ..., only items of type action ... shall be in the set of items. The EXPRESS of the Where Rule seems to have an error: (NOT (SELF.role.name IN ['actual end','actual start','planned end', 'planned start','required end','earliest end','latest end','start', 'actual'])) AND item_correlation(SELF.items,['ACTION', ...

Proposed Solutions/Remarks:

Correct the EXPRESS to: (SELF.role.name IN ['actual end','actual start','planned end', 'planned start','required end','earliest end','latest end','start', 'actual']) OR item_correlation(SELF.items,['ACTION', ... ----

Discussed Solutions:

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Do as proposed.

For derivation: see picture.

Incorporated Solutions:

Done as proposed for all rules applicable (systematic error).

Issue Reference No.: 28

Originator:	Juergen Mohrmann	**Date:**	11.06.1999
Country No.:	GER-28	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	T2	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Mappings of affected_plane at geometric_tolerance subtypes needs to be corrected.

Issue Description:

Reference Path in mappings of affected_plane attribute in AOs perpendicularity_tolerance, parallelism_tolerance, symmetry_tolerance, position_tolerance, and straightness_tolerance is defined via tolerance_zone. Instead the shape aspect of the toleranced_shape_aspect has to be used.

Proposed Solutions/Remarks:

Correct indicated mappings accordingly: ... geometric_tolerance geometric_tolerance.toleranced_shape_aspect -> shape_aspect <- shape_aspect_relationship.relating_shape_aspect ... INSTEAD OF ... geometric_tolerance <- tolerance_zone.defining_tolerance[i] tolerance_zone <= shape_aspect <- shape_aspect_relationship.relating_shape_aspect ... ----

Discussed Solutions:

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=> Martin Philipp will check with Minutes of Lilllehammer WS, since decision on that issue was taken there.

Incorporated Solutions:

In the case of using viewing planes, the tolerance zones have infinite extent normal to the viewing plane and are bordered by 2 planes a distance apart as specified by the tolerance value.

The viewing plane has to be associated with the tolerance via its toleranced_shape_aspect, since it is a characterisdtic of the tolerance, not the tolerance zone. The tolerance zone is the aggrgation of all tolerances, and their eventually existing viewing planes as defined by the tolerances that refer to it.

As a consequence, for the viewing plane approach different shape_aspects are required for each instance of tolerance that has an individual viewing plane.

Issue Reference No.: 29

Originator:	Juergen Mohrmann, debis Systemhaus Industry, mohrmann@debis.com	**Date:**	15.09.1999
Country No.:	GER-29	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2864 (G.41)
Related Part/UoF:	FF_1-3	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Inclusion of Feature_group ?

Issue Description:

During AP224 and AP214 harmonization it turned out that AP224.2 has introduced a concept of feature_group for a grouping of features as an additional information for downstream applications (e.g. CAM systems). One example would be to group all kinds of transition_features (chamfers, edge_rounds) that are manufactured at the end after all other features have been introduced on the part. Another example would be a group of 'fixture_holes' that have to be manufactured first in order to fix the part for processing of the other features. The idea is a very generic grouping mechanism for features that allows the designer of the part to give by an appropriate name string for the group the downstream application some additional information. In AP214 there exists currently such a general group concept, however it is not applicable to form_features, i.e. feature_occurrenc.

Proposed Solutions/Remarks:

If requirement is accepted, then add shape_element as supertype of feature_occurrence to group.element. In order to accomplish this group.element shall point to a new select_type group_element_select with the entries detailed_element and shape_element. Write a constraint that a mixture of these two concepts (detailed_element, shape_element) in one group shall not be allowed.

Discussed Solutions:

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==

- Do as proposed regarding modeling in the ARM.

- Change the example explaining that the grouping of features in important for industrial usage.

- Groups of features should not to be allowed to be on a layer.

Incorporated Solutions:

1),2) done as proposed.

3) documented in structuring method hierarchy.

Issue Reference No.: 30

Originator:	Juergen Mohrmann, debis Systemhaus Industry, mohrmann@debis.com	**Date:**	15.09.1999
Country No.:	GER-30	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2850 (G.27)
Related Part/UoF:	FF1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

General_feature needs profile and path.

Issue Description:

One idea of AP214 general_feature was to provide a general mechanism for user_defined features that allow the definition of additional features that are not defined explicitly in AP214 UoF FF2. These feature definitions should also structurally cover the additional features as defined in AP224. During AP224 and AP214 harmonization it was detected that that the current modelling of AP214's general feature is not sufficient, since

key components of features are paths and profiles in certain roles besides the explicit feature_paramenters at the general_feature. These important relationships are not shown in the ARM.

Proposed Solutions/Remarks:

Add in the ARM of AP214 2 attributes at general_feature:

- additional_path_usage S[0:?] to path
- additional_profile_usage S[0:?] to profile

Discussed Solutions:

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- Do as proposed.
- Add additional AO parameter_role referencing Profile, having attribute role_name.
- Add figure explaining the usage of different coordinate systems as additional information on the feature (see picture).

Incorporated Solutions:

added AO's path_parameter, profile_parameter, each with parameter_role, and context referencing, general_feature, and associated_profile/path referencing profile/path. Added note that semantics of axis_placement is subject to bilateral agreement.

Issue Reference No.: 31

Originator:	Juergen Mohrmann, debis Systemhaus Industry, mohrmann@debis.com	**Date:**	15.09.1999
Country No.:	GER-31	**Issue status:**	withdrawn, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2863 (G.40)
Related Part/UoF:	FF2	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Replicate_base_assignment to feature_occurrence instead of feature_definition

Issue Description:

During AP224 and AP214 harmonization it turned out that the relationship in the AP214 ARM replicate_base_assignment.base_feature -> feature_definition is not very precise. Since replicate_feature shall be available for the instanced_feature and placed_feature approach, it would be better to reference feature_occurrence instead.

Proposed Solutions/Remarks:

Change in the ARM replicate_base_assignment.base_feature -> feature_occurrence instead of feature_definition OR replicate_feature.replicate_base -> feature_occurrence and deprecate replicate_base_assignement. Check mapping which approach is more appropriate for compatibility with AP224.

Discussed Solutions:

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Issue withdrawn by the Originator.

Incorporated Solutions:

no action required.

Issue Reference No.: 32

Originator:	Juergen Mohrmann, debis Systemhaus Industry, mohrmann@debis.com	**Date:**	15.09.1999
Country No.:	GER-32	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2850 (G.27)
Related Part/UoF:	FF3	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Placed_feature approach for thread

Issue Description:

During AP224 and AP214 harmonization it turned out that through the changed AIM structure (thread subtype of feature_definition, thread_occurrence removed) that the placed_feature approach would be also possible for thread (through applied_area). However, this is not possible due to the AP214 ARM.

Proposed Solutions/Remarks:

Introduce at placed_feature.is_placed_by a new select_type feature_placement_select of feature_placement and placed_thread_feature. Add placed_thread_feature as a new subtype of thread_feature with the additional attribute placement_reference to geometric_model, corresponding to the attribute at feature_placement. All other attributes of feature_placement correspond to inherited attributes of thread_feature:

- placement (to transformation) corresponds to orientation (to axis_placement)
- placed_definition (to feature_definition) corresponds to thread_specification

Discussed Solutions:

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Rejected, since 224 does not know about placed_feature.maximum_feature_limit

Incorporated Solutions:

threads was discussed extensively in previous workshop and finally ruled out.
no action required.

Issue Reference No.: 33

Originator:	Juergen Mohrmann, debis Systemhaus Industry, mohrmann@debis.com	Date:	15.09.1999
Country No.:	GER-33	Issue status:	accepted, Closed
Urgency:	minor	Type:	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	2850 (G.27)
Related Part/UoF:	FF2	Clause:	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

Add feature_definition.maximum_feature_limit

Issue Description:

During AP224 and AP214 harmonization it turned out that in AP224.2 an additional requirement occurred for a maximum limitation plane for all defined features (that are virtually infinite) to define a maximum extension for the form features.

Proposed Solutions/Remarks:

Add optional attribute maximum_feature_limit to plane at AO feature_definition

Discussed Solutions:

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Add optional attribute named "maximum_feature_limit" pointing from feature_occurence to plane.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 34

Originator:	Juergen Mohrmann, debis Systemhaus Industry, mohrmann@debis.com	Date:	15.09.1999
Country No.:	GER-34	Issue status:	accepted, Closed
Urgency:	minor	Type:	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	2851, 2859 (G.28, G.36)
Related Part/UoF:	FF2	Clause:	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

Represent Round_hole with top_chamfer as compound_hole.

Issue Description:

During AP224 and AP214 harmonization it turned out that in AP214 the Round_hole with optional attribute top_chamfer is unnecessary complex in the AIM instantiation and not compatible at all to the AP224 approach. The approach should be through a compound_feature of a Round_hole and a Tapered Round_hole. This representation is then totally implicit, whereas with the top_chamfer the inner wall faces of the Round_hole would be needed for the chamfer_definition.

Proposed Solutions/Remarks:

Remove optional attribute top_chamfer from Round_hole. Add new subtype Compound_hole of Compound_feature_in_solid with attribute compound_hole_type (mandatory) with 2 possible values: 'countersunk' or 'counterbore'. The Compound_hole shall be constrained to be a Compound_feature_in_solid with exactly to Compound_feature_in_solid_elements of type Round_hole. Addtionally the attribute feature_type of Compound_feature_in_solid shall be optional, because of the new subtype case (compound_hole).

Discussed Solutions:

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==

- Make compound_feature_in_solid (ABS)

- Create two subtypes tied by a ONEOF relationship:

 - general_compound_feature_in_solid with mandatory attribute fature_type

 - compound_hole with mandatory attribute compound_hole_type and optional attribute feature_type

Incorporated Solutions:

done as proposed.

Issue Reference No.: 35

Originator:	Juergen Mohrmann, debis Systemhaus Industry, mohrmann@debis.com	**Date:**	15.09.1999
Country No.:	GER-35	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2852 (G.29)
Related Part/UoF:	FF2	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Add explicit face representation to transition_feature types as attributes for AP224 compatibility.

Issue Description:

During AP224 and AP214 harmonization it turned out that in AP224 the explicit faces as a result of applying a transition_feature are also referenced as faces of the transition_feature definition. It was agreed to manage them basically as optional attributes in both APs for the constant_radius cases and as mandatory attributes for the more complex general cases.

Proposed Solutions/Remarks:

Add the following attributes in the AP214 ARM (referencing face):

- chamfer.chamfer_face (optional)

- edge_round.edge_round_face (mandatory)

- constant_radius_edge_round.edge_round_face ((RT) optional)

- fillet.fillet_face (mandatory)

- constant_radius_fillet.fillet_face ((RT) optional)

Discussed Solutions:

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==

Do as proposed except:

- chamfer.chamfer_face will be mandatory,

- constant_radius_edge_round.edge_round_face will be mandatory and

- constant_radius_fillet.fillet_face will be mandatory.

See also S_MP_00001-4

Incorporated Solutions:

done as proposted.

Issue Reference No.: 36

Originator:	Juergen Mohrmann, debis Systemhaus Industry, mohrmann@debis.com	**Date:**	15.09.1999
Country No.:	GER-36	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2852 (G.29)
Related Part/UoF:	FF2	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Rename attributes of Directed_taper (without draft_...).

Issue Description:

During AP224 and AP214 harmonization it turned out that in AP224 does not include one kind of taper, the directed_taper. AP224 agreed to include this kind of taper as well, if the attributes are renamed to remove the term draft that indicates a usage exclusively for casting that is outside of AP224's scope.

Proposed Solutions/Remarks:

Rename the attributes of Directed_taper:

- draft_angle to angle

- draft_direction to direction

Discussed Solutions:

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==

Do as proposed.

Incorporated Solutions:

done as proposted.

Issue Reference No.: 37

ISO/DIS 10303-214 – Issue log

Originator:	Juergen Mohrmann, debis Systemhaus Industry, mohrmann@debis.com	**Date:**	15.09.1999
Country No.:	GER-37	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2850, 2853 (G.27, G.30)
Related Part/UoF:	FF2	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Make location_and_orientation attribute mandatory in the AP214 ARM, consistent with AIM and AP224.

Issue Description:

During AP224 and AP214 harmonization it turned out that in AP224 ARM and AIM the corresponding attributes for location_and_orientation are mandatory at AOs feature_definition and profile, which makes sense.

Proposed Solutions/Remarks:

Change attribute location_and_orientation from optional to mandatory at AO Feature_definition and Profile.

Discussed Solutions:

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- It has to be unambigiously stated that the loation and orientation have to be specified for each path and profile.
- For each feature_definition has to be stated which of the existing orientation and location instances is the defining one.
- Include mandatory reference from feature_definition to axis_placement.
- Make location_and_orientation optional for general_feature and feature_definition.
- Re-declare mandatory location_and_orientation attribute for process_feature_in_solid and replicate_feature.
See also S_UP_00001-4.

Incorporated Solutions:

Orientation of profiles and paths according to document R_MP_00143-1.doc.

Definitions of process_feature_in_solid, replicate_feature and subtypes, where appropriate.

circular_closed_prof.

ngon_profile

rectangular_closed_p.

general_closed_p.

partial_circular_p.

square_u._p.

rounded_u._p.

rec._prof.

tee_prof.

general_open_p.

general_path

linear_path

complete_circ._path

partial_circ._path

Issue Reference No.: 38

Originator:	Juergen Mohrmann, debis Systemhaus Industry, mohrmann@debis.com	**Date:**	15.09.1999
Country No.:	GER-38	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2853 (G.30)
Related Part/UoF:	FF2	**Clause:**	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

Ngon_profile with diameter and flag for circumscribed_or_across_flats.

Issue Description:

During AP224 and AP214 harmonization it turned out that in AP224.2 has a requirement to describe the diameter of a ngon_profile as either circumscribed_diameter or diameter_across_flats. The circumscribed_radius in AP214's ARM is not compatible to AP224 IS anyway because there the circumscribed_diameter is specified.

Proposed Solutions/Remarks:

Change attribute circumscribed_radius to diameter and add attribute circumscribed_or_across_flats with values 'circumscribed' or 'across flats' for compatibility with AP224.2.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Do as proposed, except use a fixed list with the strings used in the mapping rather than the boolean type for the circumscribed_or_across_flats.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 39

Originator:	Juergen Mohrmann, debis Systemhaus Industry, mohrmann@debis.com	**Date:**	15.09.1999
Country No.:	GER-39	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2853 (G.30)
Related Part/UoF:	FF2	**Clause:**	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

Add profile_limit at Open_profile subtypes.

Issue Description:

During AP224 and AP214 harmonization it turned out that in AP224.2 an additional requirement occurred for a limitation plane for several open_profiles (that are virtually infinite) to define a maximum extension for the profiles Square_u_profile, Rounded_u_profile, Vee_profile, Tee_profile, and General_open_profile.

Proposed Solutions/Remarks:

Add optional attribute profile_limit to plane at AOs Square_u_profile, Rounded_u_profile, Vee_profile, Tee_profile, and General_open_profile.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

- Add new AO profile _usage with optional attributes is_defined_in and profile_limit, pointing to AO profile

- Introduce association from boss_feature to profile_usage named "boundary"

- Add description in clause 4.2 for which features which profiles are allowed to be used.

- Move all assertions from the subtypes of profile to profile.

See picture and S_UP_00001-4.

Incorporated Solutions:

reworked EXPRESS and definitions of slot_-, round_-, pocket_-, boss_-, and rib_feature;

introduced profile_usage and open_profile_usage.

Issue Reference No.: 40

Originator:	Juergen Mohrmann, debis Systemhaus Industry, mohrmann@debis.com	**Date:**	15.09.1999
Country No.:	GER-40	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2859 (G.36)
Related Part/UoF:	FF2	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Replace Flat_with_chamfer_bottom by Flat_with_taper_bottom.

Issue Description:

During AP224 and AP214 harmonization it turned out that the Flat_with_chamfer_bottom for a hole_bottom_condition is unnecessary complex in terms of AIM instantiation and is not solely definable in an implicit way because of the needed faces for the referenced chamfer. By usage of the taper concept this problem can be avoided. The proposed flat_with_taper_bottom will be added also to AP224.2 due to the harmonization discussions.

Proposed Solutions/Remarks:

Replace Flat_with_chamfer_bottom by new AO Flat_with_taper_bottom with attributes taper_angle and final_diameter, both to feature_parameter.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Do as proposed.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 41

Originator:	Juergen Mohrmann, debis Systemhaus Industry, mohrmann@debis.com	**Date:**	15.09.1999
Country No.:	GER-41	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2859 (G.36)
Related Part/UoF:	FF2	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Add optional attribute slot_depth at Slot_feature.

Issue Description:

During AP224 and AP214 harmonization it turned out that in AP224.2 an additional requirement occurred for an a slot_depth at Slot_feature. In simple cases this can be derived via the position of the profile with respect to the part's surface. However, in more complex cases this is not trivial to derive, and the explicit value for the maximum slot_depth in the part is a valuable and required information.

Proposed Solutions/Remarks:

Add optional slot_depth to feature_parameter for Slot_feature.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
==
Allow profile_limit for partial_circular_profile.
Furthermore: see S_UP_00001.

Incorporated Solutions:

covered by #39. no action required.

Issue Reference No.: 42

Originator:	Juergen Mohrmann, debis Systemhaus Industry, mohrmann@debis.com	**Date:**	15.09.1999
Country No.:	GER-42	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2859, 2860 (G.36, G.37)
Related Part/UoF:	FF2	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Rename of feature attribute names in AP214 ARM in accordance with AP224 and better application meaning.

Issue Description:

During AP224 and AP214 harmonization it turned out that some of the feature attributes in the AP214 ARM do not reflect the application meaning and are not in accordance with AP224.

Proposed Solutions/Remarks:

Rename the following attribute name for harmonization with AP224:

- Round_hole.sweep_path --> Round_hole.hole_depth

- Round_hole.boundary --> Round_hole.diameter

- Boss_feature.sweep_path --> Boss_feature.boss_height

- Pocket_feature.sweep_path --> Pocket_feature.pocket_depth

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Do as proposed.

Incorporated Solutions:

done as proposted.

Issue Reference No.: 43

Originator:	Juergen Mohrmann, debis Systemhaus Industry, mohrmann@debis.com	**Date:**	15.09.1999
Country No.:	GER-43	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2860 (G.37)
Related Part/UoF:	FF2	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Ngon_profile available for General_boss.

Issue Description:

During AP224 and AP214 harmonization it turned out that in the AIM in AP224 for General_boss General_closed_profile and Ngon_profile is allowed. In AP214 only General_closde_profile is allowed. This is reflected in the ARM by General_boss.boundary pointing just to General_closed_profile that needs to be extended.

Proposed Solutions/Remarks:

Add a new select_type general_boss_boundary_select with General_closed_profile and Ngon_profile for General_boss.boundary.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Do as proposed.

Incorporated Solutions:

covered by #39. Ngon explicitly allowed for general_boss.

Issue Reference No.: 44

Originator:	Juergen Mohrmann, debis Systemhaus Industry, mohrmann@debis.com	**Date:**	15.09.1999
Country No.:	GER-44	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2860 (G.37)
Related Part/UoF:	FF2	**Clause:**	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

Attribute is_applied_to unnecessary for Through_bottom_condition.

Issue Description:

During AP224 and AP214 harmonization it turned out that in the AIM in AP224 the attribute is_applied_to (start_or_end) is not available for the Through_bottom_condition, because this indication is not necessary for this case. The AP214 ARM should be remodeled to reflect this fact.

Proposed Solutions/Remarks:

Add new select_type pocket_bottom_condition_select with Pocket_bottom_condition and Through_bottom_condition for Pocket_feature.bottom_condition. Remove Through_bottom_condition as a subtype of Pocket_bottom_condition and define it as an independent AO.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

- Do as proposed and rename through_bottom_condition to through_pocket_bottom_conditon.

- Do the same for round_hole.

Incorporated Solutions:

done as proposted.

Issue Reference No.: 45

Originator:	Juergen Mohrmann, debis Systemhaus Industry, mohrmann@debis.com	**Date:**	15.09.1999
Country No.:	GER-45	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2862 (G.39)
Related Part/UoF:	FF2	**Clause:**	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

Mandatory and optional attributes for Thread_specification and Defined_thread.

Issue Description:

During AP224 and AP214 harmonization it turned out that the attributes of Thread_feature and Thread_specification are not well harmonized, especially the definition of mandatory and optional attributes.

Proposed Solutions/Remarks:

Change the following attributes of Thread_specification for AP224 harmonization:

- hand --> from optional to mandatory

- metric --> add new attribute of type BOOLEAN (mandatory).

Change the following attributes of Defined_thread to optional:

- minor_diameter

- pitch_diameter

- crest

Add a rule that at least one of the optional attributes of Defined_thread has to be present in order to use this subtype of Thread_specification.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Do as proposed, except remove "metric" in Thread_specification (based on harmonization with AP224 and feedback from thread expert.

- nameType (mandatoryandatory/optional)

- fit_class   MANDATORY

- hand   MANDATORY

- major_diameter   MANDATORY

- density   MANDATORY

- form_type   MANDATORY

- qualifier   OPTIONAL examle: numandatoryber of parallel helixes

- inner   MANDATORY

- minor_diameter   OPTIONAL   (derived from fit_class)

- crest   OPTIONAL (may be derived from form_type adn major_diameter)

- pitc_diameter   MANDATORY

Incorporated Solutions:

inserted fixed list for hand; defined attributes as proposted; added examples and notes accordingly.

Issue Reference No.: 46

Originator:	Juergen Mohrmann, debis Systemhaus Industry, mohrmann@debis.com	**Date:**	15.09.1999
Country No.:	GER-46	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2863 (G.40)
Related Part/UoF:	FF2	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Circular_pattern.rotation should be optional.

Issue Description:

During AP224 and AP214 harmonization it turned out that the attribute rotation of Circular_pattern could be optional with a default of 0 degrees.

Proposed Solutions/Remarks:

Change Circular_pattern.rotation to optional in the ARM.

Discussed Solutions:

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===

- Issue rejected, since APs still harmonized in this area. Attribute stays mandatory.

- Due to consistency reasons, all attributes which are still optional and which do have the semantics that the not-availability of the attribute value means "equals zero" should be made mandatory.

- All consistency issues should be applied to solid features and penal features.

See S_MP_00001-4.

Plenary session:

Attributes should stay optional.

Incorporated Solutions:

done as proposted.

Issue Reference No.: 47

Originator:	Friedrich Elsässer, EDS	**Date:**	16.09.1999
Country No.:	GER-47	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	FF2	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Name of attribute base_fillet_radius of form_feature_in_panel

Issue Description:

To be consistent with similar feature attributes the name of base_fillet_radius should change to base_radius.

Proposed Solutions/Remarks:

Do as proposed

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Do as proposed.

Incorporated Solutions:

done as proposted.

Issue Reference No.: 48

Originator:	Friedrich Elsässer, EDS	**Date:**	18.09.1999
Country No.:	GER-48	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	FF2	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Name of attribute target_fillet_radius of form_feature_in_panel

Issue Description:

To be consistent with similar feature attributes the name of target_fillet_radius should change to target_radius.

Proposed Solutions/Remarks:

Do as proposed

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Do as proposed.

Incorporated Solutions:

done as proposted.

Issue Reference No.: 49

Originator:	Friedrich Elsässer, EDS	**Date:**	16.09.1999
Country No.:	GER-49	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	FF2	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Name of attribute base_fillet_radius of panel_hole_with_barring

Issue Description:

To be consistent with similar feature attributes the name of base_fillet_radius should change to base_ radius.

Proposed Solutions/Remarks:

Do as proposed

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Do as proposed.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 50

Originator:	Friedrich Elsässer, EDS	**Date:**	17.09.1999
Country No.:	GER-50	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	P1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Missing attribute in application object vector_appearance

Issue Description:

The attribute for colour is missing to completely define the application object vector_appearance

Proposed Solutions/Remarks:

Add attribute colour to application object vector_appearance.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Make vector_appearance subtype of curve_appearance and remove attribute arrow_line_font from

vector_appearance. Since curve_appearance has attributes width, font and colour assigned, issue is solved.

Incorporated Solutions:

done as proposted.

Issue Reference No.: 51

Originator:	Friedrich Elsässer, EDS	**Date:**	17.09.1999
Country No.:	GER-51	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Select: documented_element _select

Issue Description:

Beads are used to reinforce the floor sheat metal. Profile characteristics to generate the beads (bead_feature) may be documented. Therefore the application object profile should be added to documented_element_select.

Proposed Solutions/Remarks:

Add application object profile to documented_element_select

Discussed Solutions:

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==

accepted (as proposed): add also AO path to the documented_element_select

Incorporated Solutions:

added profile and path to documented_element_select

Issue Reference No.: 52

Originator:	J. Katzenmaier	**Date:**	15.09.1999
Country No.:	GER-52	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S2	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Mapping of group

Issue Description:

The mapping of group proposes to use rep_item_group if the group is part of a layer. rep_item_group is a subtype of group and representation_item (see attached picture). According to STEP rules a representation_item can not exist stand-alone. Either it needs to be referenced by another representation_item or by a representation. This is not the case for a group.

Proposed Solutions/Remarks:

Either the mapping needs to be changed or explanation is needed which representation to take.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

- create subtype of presentation_representation

- use this referencing group_rep_item

- use this referenced by presentation_layer_assignment

- Check with CAD Implementors, taken into consideration, that context is 2D

- otherwise: use dummy representation

Incorporated Solutions:

use of presentation_representation not feasible, because limited to 2d.

other representations not available, since restricted to special subtypes of

representation_item.

mapping changed, using dummy representation

Issue Reference No.: 53

Originator:	J. Katzenmaier	**Date:**	15.09.1999
Country No.:	GER-53	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S3	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Mapping of item_instance

Issue Description:

In the mapping of item_instance to product_identification as definition the reference to note 6 seems to be wrong. The note implies that the target object (product_identification) has several or cases, some of which can not be mapped. However, in this case the target object does not have or cases. It is one or case of the source object that can not be mapped.

Proposed Solutions/Remarks:

Change the note.

Discussed Solutions:

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===

Adressed by solution on issue #212 (Improve of wording for "NO MAPPING")

Incorporated Solutions:

Mapping and note have been changed to reflect there is no mapping for OR case #3.

Issue Reference No.: 54

ISO/DIS 10303-214 – Issue log

Originator:	J. Katzenmaier		**Date:**	15.09.1999
Country No.:	GER-54		**Issue status:**	accepted, Closed
Urgency:	minor		**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)		**Page:**	
Related Part/UoF:	S4		**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:				

Mapping of effectivity.effectivity_context

Issue Description:

The effectivity_context currently maps to a product_definition_context associated with the effectivity through an effectivity_assignement and an effectivity_context_assignment (see attached picture). I don't like this solution for three reasons: 1) This is a rather complicated soultion. 2) Through this solution the context is associated with the assignment and not with the effectivity as in the ARM. 3) it is questionable if effectivity_context_assignment will ever be part of the pdm-schema.

Proposed Solutions/Remarks:

It seems that the name_attribute of the effectivity is not yet used by any other ARM concept. Therefore I propose to use name_attribute to map effectivity_context. Change the note.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Discussion: The rather complicated mapping is not reflected in the ARM

Decision:

1. Change mapping to effectivity.name

2. Check if effectivity_assignment.name is better solution

3. Remove effectivity_context_assignment from AIM (is a side effect of the new mapping)

Incorporated Solutions:

Mapping of effectivity_context changed to effectivity.name.

Issue Reference No.: 55

Originator:	J. Katzenmaier		**Date:**	15.09.1999
Country No.:	GER-55		**Issue status:**	accepted, Closed
Urgency:	minor		**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)		**Page:**	
Related Part/UoF:	S3		**Clause:**	Cl. 4.2 (ARM) , Clause_5.2.1
Sentence/abstract/keywords:				

item_instance defined as product_identification

Issue Description:

To my knowledge it has been agreed earlier that a product_definition that represents an item_instance refers to the same instance of product_definition_formation as the product_definition reprenting the ddid that serves as

definition for the item_instance. It is unclear which product_definition_formation is referenced if the definition of the item_instance is a product_identification.

Proposed Solutions/Remarks:

Discuss the problem and document the agreement in clause 5.2.1 or in the recommended practices. Change the note.

Discussed Solutions:

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==

it references one product_definition_formation which has a product marked as a conceptual product . this conceptual product represents the product of the product class, the product_identification refers to. This conceptual product may represent a product_component on this level.

Add mapping rule specfying the reference path up to the conceptual product. (mapping of Application Assertion item_instance to product_identification as definition)

Incorporated Solutions:

Mapping has been changed to indicate and include the associated product_definition_formation and associated product for the case an item_instance is defined by a product_identification.

Issue Reference No.: 56

Originator:	J. Katzenmaier	**Date:**	15.09.1999
Country No.:	GER-56	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	T2	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Explanation of compound datum

Issue Description:

The mapping and rules of the concept of compound datum do not define clearly how an instantiation in the AIM is supposed to look like. The main question is which datum_features are to be referenced by the datums. The fundamental concepts and assumptions should explain how this is supposed to work.

Proposed Solutions/Remarks:

Agree to the instantiation shown on the attached picture and add a corresponding explanation to clause 5.2.1 or to recommended practices.

Discussed Solutions:

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==

Do as proposed.

Incorporated Solutions:

Inserted a new section in clause 5.2.1, fundamental concepts and assumptions regarding tolerances. It coveres especially viewing planes and the use of common_datum, see issues #28, #126.

Issue Reference No.: 57

Originator:	J. Katzenmaier	**Date:**	15.09.1999
Country No.:	GER-57	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	FF_1-3	**Clause:**	Clause_5.2.1

Sentence/abstract/keywords:

Explanation of tolerancing of feature dimensions

Issue Description:

The mapping and rules of the concept of tolerancing of feature dimensions do not define clearly how an instantiation in the AIM is supposed to look like. The main question is how to use the various shape_dimension_representations. The fundamental concepts and assumptions should explain how this is supposed to work.

Proposed Solutions/Remarks:

Agree to the instantiation shown on the attached picture and add a corresponding explanation to clause 5.2.1 or to recommended practices.

Discussed Solutions:

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===

Do as proposed.

Incorporated Solutions:

Done as proposed

Issue Reference No.: 58

Originator:	J. Katzenmaier	**Date:**	15.09.1999
Country No.:	GER-58	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	D1	**Clause:**	Cl. 5.1 (Mapping tables) , Annex_A

Sentence/abstract/keywords:

Dimension callout without projection lines

Issue Description:

There are (at least) two possible cases of how to use a dimension_curve_directed_callout: case 1 with projection lines and case 2 without projection lines (see attached picture). A dimension_curve_directed callout requires through its rules to include annotation other than the dimension curve. In case 1 this is no problem since there are the projection lines in the callout. But what about case 2. What else is in the callout?

Proposed Solutions/Remarks:

Explain how to use the dimension_curve_directed_callout in case 2 despite of this rule or submit issues against 101, 202, ... and change AP214 accordingly.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

- in AICs and 202 usage of projection line is required in every case (based on rules)

=> feedback of CAx Implementor forum is needed

Incorporated Solutions:

solved by issue #74.

Issue Reference No.: 59

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-59	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:		**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

applied_group_assignment has undecidable where-rules

Issue Description:

the where rules of applied_group_assignment are of the form:

if SELF.role.name = 'xxx' then .... A role for a applied_group_assignment is not necessarily given. The function get_role that derives the role returns undeterminate. So rules specified this way are undecidable.

This is an unlucky situation for conformance checking.

Proposed Solutions/Remarks:

code the rules in the form:

if a role is given AND SELF.role.name = 'xxx' then ...

Discussed Solutions:

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===

If "undetermined or true"   or   "undetermined or false" evaluate to undetermined, than the issue is rejected.

If one of these combinations evaluates to false, then the issue is accepted.

Incorporated Solutions:

According to TC2 of part11 the following applies for OR operator on the listed combinations:

OR-Table:

```
===========================
OP1     OP2     RESULT
---------------------------
true    true    true

true    unknown true

true    false   true

unknown true    true

unknown unknown unknown

unknown false   unknown

false   true    true

false   unknown unknown

false   false   false
```

Since "SELF.role.name" evaluates to unknown (see EXPRESS LRM, p.106), if no role is present, then the rule evaluates to either unknown or true. Note that a return value of unknown in a local rule does not invalidate an instance.

Issue Reference No.: 60

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-60	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	G_1-8	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

additional rules should forbid isolated shape_representations

Issue Description:

AP214 currently allows the exchange of isolated geometry. There is no AIM restriction that prevents one from just putting a shape_representation into an exchange file without saying what this shape actually represents (via item_shape and item or model_property and activity etc.)

In the context of CAD-PDM integration scenarios it would be helpful to indicate via such a restriction that the focus of AP214 is the exchange of product descriptions rather than just geometry.

AP203 has such a rule.

Proposed Solutions/Remarks:

add something like:

RULE dependent_instantiable_shape_representation FOR (shape_representation);

WHERE

  WR1: SIZEOF (QUERY (sr <* shape_representation |

```
    NOT (SIZEOF (USEDIN (sr, ")) >= 1))) = 0;
END_RULE;
```

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Do as proposed.

Incorporated Solutions:

Done as proposed

Issue Reference No.: 61

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-61	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

uniqueness requirement for item.id not mirrored in AIM

Issue Description:

The ARM states that item.id shall be unique. General uniquessness can in exchnage/sharing scenarios not be guranteed. But uniqueness in the context of the 'id owner'-organisation shall be required.
The AIM does not reflect this requirement.

Proposed Solutions/Remarks:

Add clarification on ARM descriptionlevel, that uniqueness shall be ensured in the context of an organisation (acting as id owner)
Formulate corresponding AIM rule.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

accepted: delete "This identifier shall be unique". Introduce after "For the id, an owner shall be specified by a Person_organization_assignment with role 'id owner'.". The id shall be unique within the scope of the organization that is specified in the person_or_organization_assignment with the role "id_owner"

Incorporated Solutions:

done as proposted.

Issue Reference No.: 62

ISO/DIS 10303-214 – Issue log

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-62	**Issue status:**	rejected, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	FF2	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

wrong coding of round_hole.wr4

Issue Description:

the coding of round_hole.wr4 does not account for the possibility that there are two product_definition_shape

associatied with the round_hole (one identifying feature geometry, the other giving the parameters).

In that case the <=1 assumption in the queries does not hold.

Proposed Solutions/Remarks:

used round_hole.wr4 of AP224 FDIS

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Rejected, since Part 41 states that only one instance of product_definition_shape is allowed to reference an item.

Therefore the rule in AP214 is coded correctly.

Incorporated Solutions:

no action required

Issue Reference No.: 63

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-63	**Issue status:**	rejected, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	D1	**Clause:**	Annex_A
Sentence/abstract/keywords:			

wrong coding of draughting_annotation_occurrence.wr7 (AIC 504)

Issue Description:

the rule is wrongly coded

Proposed Solutions/Remarks:

NOT ('AIC_DRAUGHTING_ANNOTATION.ANNOTATION_TEXT_OCCURRENCE'
IN TYPEOF (SELF)) OR
(SIZEOF (TYPEOF(SELF.item) *
['AIC_DRAUGHTING_ANNOTATION.COMPOSITE_TEXT',
'AIC_DRAUGHTING_ANNOTATION.TEXT_LITERAL']) = 1);

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Rejected, since it is a 504 issue.

Incorporated Solutions:

rule changed in IS version of 504. no action required.

Issue Reference No.: 64

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-64	**Issue status:**	Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S3	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

restrict_product_definitions_for_product_definition_relationship.wr2 has mismatch in formal proposition and EXPRESS coding

Issue Description:

restrict_product_definitions_for_product_definition_relationship.wr2

in the formal proposition for this rule 'part_definition' is used. The EXPRESS uses 'part definition'.

Proposed Solutions/Remarks:

Modify the formal proposition accordingly

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Incorporated Solutions:

Formal proposition was modified to correctly reflect the EXPRESS.

Issue Reference No.: 65

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-65	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	FF_1-3	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

shape_element does not account for

shape_aspect.product_definitional

Issue Description:

for a usage of shape_element the mapping does not specify the value for the shape_aspect.product_definitional, the ARM shows no corresponding requirement

Proposed Solutions/Remarks:

inlcude this attr. in the ARM

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

- semantics of shape_aspect.product_definitional on AIM level is explicitly defined and does not match the requirement on ARM level
- add shape_element to classified_element_select to be able to classify shape_element

Incorporated Solutions:

added note and example in shape element.

Issue Reference No.: 66

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-66	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	P1	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

draughting_model_annotation_layers too restrictive

Issue Description:

the global rule draughting_model_annotation_layers requires that every item of a draughting model has to be placed on a layer.

Having in mind the usage of a draughting model in 3D to annotate 3D models this requirement is seen to be too restrictive. There are CAD-systems that do not even have layers, but have 3D notes.

Proposed Solutions/Remarks:

remove rule

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Do as proposed.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 67

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-67	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	D2	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

mapping of associated_draughting_callout

Issue Description:

the mapping is not complete - how are the shape_aspects to be instantiated?

It is not compatible with corresponding mappings of AP202 and AP214 CD2 (associated_annotation_symbol) .

The ProSTEP/PDES rec prac for associative text do not represent the to be associated elements as a property of the shape_aspect_relationship, but rather links them as properties to the related/relating shape_aspects.

The mapping should not always enforce the usage of leader curves. There is a requirement to exchange 3D Notes, i.e. text in model space that is associated to elements of the model. This requirement could be mapped with usage of associated_draughting_callout. But in some cases corresponding leader lines shall not be exchanged (e.g. when the associativity is shown by highlighting or the visual depitction is deliberately left to the system discretion in an exchange scenario).

The mappings involving associativity of annoation elements currently allows force a leader curve. To always have such leader curves is not - and should not be - part of the rquirements stated in the ARM

Proposed Solutions/Remarks:

The recommended practices from ProSTEP/PDES 'associative text' use similarily a shape_aspect_relationship to model the associativity of annotation and elements of geometry. This approach uses the two related shape_aspects to represent/mark the respective elements. This approach is considered more clear then the current 214 approach, 214 does use one of the shape_aspects as dummy and represents the elements as a property of the shape_aspect_relationship. The semantics of the elements is derived from their position in the representation.items. This is considered ambigious and does not support associations of set of elements.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Issue solved by solution on #158.

Incorporated Solutions:

solved by #74. no action required.

Issue Reference No.: 68

ISO/DIS 10303-214 – Issue log

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-68	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	T1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

mapping of geometric_dimension

Issue Description:

the mapping assumes that dimensional_size is a subtype of shape_aspect. This is not the case.

The mapping of the Geometric_dimension/dimension_value relationship

in 214 tremendously differs from that in 202. The 214 mapping seems to be

incorrect. Although 214 has stated an additional requirement

to map to compound_representation_item (along with measure_rep_item, as

in 202), I am not convinced of the need for this alternate mapping

(mapping through shape_dimension_rep allows two measure_rep_items). For

this reason, I think the 202 mapping through

dimensional_characteristic_representation (as shown below) was not used

in 214 (since there is a WR in shape_dimension_representation that

states that there are at most 2 items in this rep, and both shall be

measure_rep_items).

However, 214's mapping of the dimension_callout associativity is through

shape_dimension_representation, and therefore, there is a disjoint

between the rep used in defining the value for the dimension, and

mapping this value onto the draughting dimension_callout.

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Adapt mapping:

use dimensional_characteristic_representation as mapping target to be in alignment with AP202.

Incorporated Solutions:

solved by #153. no action required.

Issue Reference No.: 69

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-69	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	T1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

mapping of a value_limitation on a dimension_value introduces redundant entity paths

Issue Description:

the mapping of ' value_limitation to limited_value' and 'size_dimension to dimension_value' introduce different entities for the same semantics.

In the resulting structure one 'branch' uses dimensional_characteristic_representation, the other branch uses property_definition

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Change mapping for value_limitation. Solved by issue #68.

Incorporated Solutions:

no action required.

Issue Reference No.: 70

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-70	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:		**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

applied_preson_organization_assignment.wr5 wrongly coded

Issue Description:

The rule says: if the role is not one of ... then ...

this rule is violated also if no role is given.

Proposed Solutions/Remarks:

re-formulate: if role is specified and ...

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Issue is in the same area as #59.

Incorporated Solutions:

rejected, since rule does not evaluate to FALSE

Issue Reference No.: 71

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-71	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	PR1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

naming of centre_of_mass requirement

Issue Description:

The name 'centre_of_mass' is misleading. A shape_dependent_property relates to shape to which not necessarily

mass is assigned. centre_of_mass points may lead to the conclusion that the represented property is a product

property - as opposed to a geometric property

Proposed Solutions/Remarks:

use 'centroid'

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

see resolution to issue #146.

centre_of_mass is a property of the product shape not a geometric property.

The geometric validation property 'centroid' can be represented by AP214 ARM using a

general_shape_dependent_property with property_type = 'centroid'.

Improve definition of centre_of_mass

Incorporated Solutions:

See # 147

Issue Reference No.: 72

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-72	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	PR1	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

shape_dependent_property description of AO ambigious

Issue Description:

clause 4.2.432 says: a Shape_dependent_property is a characteristic of an object that is closely related to the

shape of the product.

It is not clear if a shape_dependent_property is to be interpreted as a property of the product or as a property of

its shape representation.

If shape_dependent_property can be used to validate data exchange of geometry the following requirements

should be captured:

a) for the validation of data exchange processes area computations in target and sending systems are compared. Shape_dependent_property should allow for the specification of surface area Surface area should be defined as the wetted area

b) for the validation of data exchange processes area computations in target and sending systems are compared. Shape_dependent_property should allow for the specification of surface area

c) Shape_dependent_property works on the level of product_definition_shape. Thus it is not possible to associate these properties to alternate representations of that shape indivdually. This requirement should also be supported.

Proposed Solutions/Remarks:

A shape_dependent_property is a characteristic that is associated with a geometric model

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

meaning of 'object' in the definition of shape_depenent_property needs further clarification: it is either the shape of an

definitioon of an item, the occurrence of an item in the product structure or the physical realization of an item remove "that is closely related to the shape of the product." from the definition.

Incorporated Solutions:

done as proposted.

Issue Reference No.: 73

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-73	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.309.7
Related Part/UoF:	P1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

AO model_image states unclear requirements with view_volume_placement

Issue Description:

4.2.309.7 is not clear wether model_image.view_volume_placement - as the name would indicate - is intended to capture the view_reference_system or if it is related to the projected elements are placed on the view as the text says.

It seems that the mapping (for 3D geometry) has chosen the first possiblity.

The viewing pipeline is not completely specified by the ARM requirement model_image, where is the view reference system (VRC)?

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

- leave EXPRESS-G as it is

- proposal for refinement of definition:

The view_volume_placement is the coordinate system in which the viewing parameters are defined.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 74

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-74	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	P2	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

requirement to associate text to elements in the 3D model without leader lines to captured

Issue Description:

There is a requirement to exchange 3D Notes, i.e. text in model space that is associated to elements of the model. In some cases corresponding leader lines shall not be exchanged (e.g. when the associativity is shown by highlighting or the visual depitction is deliberately left to the system discretion in an exchange scenario). The mappings involving associativity of annoation elements currently allows force a leader curve. To always have such leader curves is not - and should not be - part of the rquirements stated in the ARM

Proposed Solutions/Remarks:

Adopt mapping concept to ProSTEP/PDES CAX Implementors Forum approach, use OR case in mapping to indicate wether 3D annotation or drawing annotation

Discussed Solutions:

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===

- no ARM change required, since draughting_callout covers both concepts.

- current mapping based on AP202

- remove mapping rule enforcing the presence of a leader line

- go directly from shape_aspect_associativity to draughting_callout, instead of using annotation_curve_occurence (see picture)

Incorporated Solutions:

done as proposed.

Issue Reference No.: 75

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-75	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:		**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

function item_correlation is wrongly coded

Issue Description:

item_correlation for non-empty sets always returns FALSE

Proposed Solutions/Remarks:

replace

c_types[i] := 'AUTOMOTIVE_DESIGN' + c_items[i];

with

c_types[i] := 'AUTOMOTIVE_DESIGN.' + c_items[i];

Discussed Solutions:

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==

Do as proposed.

Incorporated Solutions:

Done as proposed

Issue Reference No.: 76

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-76	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	PR1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

axis to which shape_dependent_properties are computed should be part of the requirements for

shape_dependent_property

Issue Description:

Some CAD-system allow the computation of such properties relative to arbitary axes. Depending on the axes the

result of such computations changes.

The receiver of such data should be able to extract the axes for the computation

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

accepted.

Discussion:

Axis are only required for moments_of_inertia, for the other subtypes of shape_dependent_property the definition of axis makes no sense.

Add for moments_of_inertia attribute reference_axis_placement pointing to axis_placement

comment from MU: issue originator (i.e. Markus Hauser) should check, if this is true. Especially since subtype general_shape_dependent_property was introduced later to fulfil the validation properties requirement. Are the axis reuqired for these properties?

 Incorporated Solutions:

Introduced reference_axis_placement to AO moments_of_inertia.

Issue Reference No.: 77

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-77	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

syntax error in mapping of AO unit

 Issue Description:

in OR case #18: ... (ratio_unit)>}

 Proposed Solutions/Remarks:
 Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===
Decision: remove '>' at #3,#6,#18

 Incorporated Solutions:

issue rejected after additional analysis of the proplem

Issue Reference No.: 78

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-78	**Issue status:**	rejected, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	P1	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

coordinate space of styled_geometric_model too restricted in ARM

Issue Description:

In 4.2.465 it is said "A Styled_geometric_model is defined in the Cartesian_coordinate_space of the corresponding Geometric_model". This is seen as too restrictive. Several CAD systems allow e.g. to define draughtings in inch and shape in cm coordinate systems.

Another requirement is to allow combinations of multiple component shapes in one draughting model.

Related to this issue is the question concerning the AIM/mapping, whether it is necessary to map the to be styled shape in the draughting model via a mapped_item construct. The mapping should be re-worked to account for this

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

- requirement is to have 3D model in cm and draughting in inches

- currently the same representation_context has to be used for both representations

Solution:

- styled_annotation_model.is_defined_in will be moved to supertype styled_model

- rename styled_geometry_context to styled_geometry

=> by this solution the context may be shared or not

Plenary session:

Issue rejected due to a misunderstanding.

Clarification was given, that for the purpose of the requirement to exchange "3D model and Drawing", the ARM constructs

- Styled_geometric_model resp. Geometric_model referencing Cartesian_coordinate_space and

- Drawing_sheet referencing Cartesian_coordinate_space_2d

have to be used.

Incorporated Solutions:

Added note describing the solution of the requirement in styled geometric model.

Issue Reference No.: 79

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-79	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	G_1-8	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

hybrid_geometric_model_3d should allow for topological elements

Issue Description:

4.2.542 says that topological elements are not allowed as elements of a hybrid_geometric_model_3d.

Hybrid_geometric_model_3d is currently the only available mechanism to explicitily represent portions of the

geometric_model via a shape_element. It may be desireable to pick topological elements - as e.g. faces - and represent them in a hybrid model.

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

- rephrase definition of hybrid_geometric_model: exclude reference of shell; since face is a geometric-topological element, reference of face will be allowed (i.e. reference of all geometric-topological elements will be allowed).

Incorporated Solutions:

done as proposted.

Issue Reference No.: 80

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-80	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	FF2	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

mapping of draft_direction of directed_taper incomplete

Issue Description:

the mapping specifies that the draft direction maps onto a direction_shape_representation. Indeed it should map onto a direction in this direction_shape_representation.

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Accpeted. Do as proposed.

Incorporated Solutions:

done as proposed. Enhanced similar cases accordingly.

Issue Reference No.: 81

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-81	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S3	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

same requirements get mapped to differing places depending on the usage of S7

Issue Description:

e.g. quantified_instance.quantity

This makes product structure info not exchangeable between systems that implement s3 and systems that as well implement s7

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Adressed by solution on issue #362.

Incorporated Solutions:

Addressed by solution to issue #362.

Issue Reference No.: 82

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-82	**Issue status:**	Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

product_requires_version wrongly coded

Issue Description:

the rule is violated if more than one product_definition_formation is associated with one product

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Incorporated Solutions:

Changed EXPRESS to read: SIZEOF(QUERY (prod <* product| (SIZEOF (USEDIN (prod, 'AUTOMOTIVE_DESIGN.PRODUCT_DEFINITION_FORMATION.OF_PRODUCT')) = 0))) = 0;

Issue Reference No.: 83

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-83	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	D1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

mapping of dimension_callout to dimension_symbol

Issue Description:

the mapping has an additional annotation_text_occurrence in its last line

Proposed Solutions/Remarks:

delete line

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Current mapping path is wrong and will be adapted.

Incorporated Solutions:

changed in last but one line: annotation_text occurrence to annotation_symbol_occurrence.

Issue Reference No.: 84

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-84	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

product_definition_context /

mapping of design_discipline_item_definition.is_relevant_for

Issue Description:

for harmonization with 203 and other APs a primary context of a product_definition shall be referenced via the frame_of_reference. Additional contexts should be associated via product_definition_context_association.
In AP214 multiple application_context can be defined by attribute is_relevant_for. All such relationships are mapped to product_definition_context_association. In AP203 only one application_context can be assigned. This is mapped to product_definition.frame_of_reference. The two mappings are not interoperabel. The primary application_context should be mapped in the same way.

Proposed Solutions/Remarks:

Distinguish between primary and secondary application_context. Map design_discipline_item_definition.is_relevant_for[1] to product_definition.frame_of_reference. Map design_discipline_item_definition.is_relevant_for[i] for i>1 as current.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Discussion:

The distinction in the ARM between one application_context mapped to product_definition_context.life_cycle_stage and further application_context instances mapped to

product_definition_context_association would resolve the AP203 interoperability problem.

Naming the first one primary and the others secondery is not a good solution, as there is not really a primary one. Better to call it initial_context and additional_context.

The Swedish delegation raises the concern, that not always an application_context, resp. a life_cycle_stage can be given. The exchange on information about application_context is an assertion the sender gives to the receiver. There may be situation where the sender won't make any statements about the intention and purpose of the transferred data. Making either product_definition.frame_of_reference or product_definition_context.life_cycle_stage optional in Part41 would solve this problem.

It was discussed, to apply the proposed solution to product_component and product_function, too for consistency reason. This proposal was rejected by FRA, SWE and JPN.

Decision:

1. In the ARM, add a pointer from ddid to application_context called initial_context. Map to product_definition.frame_of_reference. Rename ddid.is_relevant_for to additional_context (with cardinality [0:?]). Map to product_definition_context_association as before.

2. Specify in clause 4.2 definition for initial_context, that it is the context the data comes from.

3. Do not apply this concept to product_component or product_function as there are strong requirements to have the context optional for these objects.

4. Raise issue against Part41e2 during ballot workshop 1999-11-14/16: Make product_definition.frame_of_reference optional, or make attributes of product_definition_context optional. If issue will be accepted, reflect solution in AP214 ARM.

 Incorporated Solutions:

incorporated as proposed

 Issue Reference No.: 85

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-85	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	PR1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

general_property structure required for definition of part properties

 Issue Description:

the mapping of 214 of part properties always requires the usage of general properties. As long as now classification systems that manage such properties independent from parts are involved this is redunant with the usage of property_definition and thus should not be required.

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Addressed by solution to issue #366.

Incorporated Solutions:

Addressed by solution to issue #366.

Issue Reference No.: 86

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-86	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	G_1-8	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

identifiers of shape_representations

Issue Description:

Other APs as well as the PDM Usage Guide recommend to use the attribute name of shape_representation to define an identification of a geometric model. This practice is in alignment with current CAx implementations and the descriptions in part 43 that define representation.name as an identifier for the representation. AP214 does not map the identification to shape_representation.name but rather uses an instance of id_attribute that is associated to the shape_representations.

Proposed Solutions/Remarks:

map to shape_rep.name

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Do as proposed, i.e. map model_id to representation.name.

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 87

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999	
Country No.:	GER-87	**Issue status:**	accepted, Closed	
Urgency:	major	**Type:**	editorial	
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**		
Related Part/UoF:	E1	**Clause:**	Cl. 5.1 (Mapping tables) ,	
Sentence/abstract/keywords:				

document type property information for documents /

specific classification of documents

Issue Description:

In AP214, the document type property information is captured in the description attribute of the related application_context. Attaching the document type property to the level of a document representation view definitionis is in general not appropriate: the concept of a document type applies to all representation view definitions of all versions of the document.

document_type_property is available to classify a document representation as well as a file. The general classification approach shall be used to classify a document (including all versions) as a whole according issue debis-GER-232-1. However, the necessary entity class (source AP214) is not part of the IRs as well as PDM Schema yet. Furthermore the recommended values (e.g. geometry, FE data, NC data, ...) for document types seem unusual at the representation or file level. Because it would mean, that e.g. two representations of the same document version may exist with different types. May a document version cover two representations, first of type "NC data" and secound of type "drawing"? Furthermore it would be totally confused if files of the same representation have different types.

Furthermore AP214 does not support document classification similar to item classification.

Proposed Solutions/Remarks:

The following classification mechanisms shall be supported by AP214:

- document_type at representation/file level reflecting application/user specific types as it is in AP214 as well as only the file is used without the "document as product approach"; therefore the recommended values are not valid here and shall be removed

- general classification as described in debis-GER-232-1 typing documents including all related versions, representation and files depending on application/user specific implementations

- a new specific_document_classification is proposed with agreed string values recommended by AP214 equivalent to item (usable for STEP processors to control, how to process with the related instances of document depending on the value, e.g., if "geometry" to checkin into CAD, if "NC data" sending the file to a CAM system etc.)

The last two approaches are already available for items. The specific_document_classification shall have the attributes "name", "type", optional description and associated_documentS[1:?]. "name" is restricted to value "document" as already required by the mapping of a document according the "document as product approach". Attribute "type" may hold the current recommended values of document_type_property.document_type_name. A further value "text" or "textual description" may be useful to classify e.g. WORD documents containing specifications, manuals or others.

A corresponding document.(INV)document_classificationS[1:?]

The mapping is proposed as follows: (p_r_p_c - product_related_product_category) :

- specific_document_classification.associated_document to p_r_p_c.products -> product

- specific_document_classification.name to p_r_p_c.name = "document"

- specific_document_classification.description to p_r_p_c.description

- specific_document_classification.type to product_category_relationship.category = p_r_p_c (see above)

product_category_relationship.sub_category = p_r_p_c (see below)

p_r_p_c.products -> product (same as above) p_r_p_c.name

See also the alternate solution as described in the attached presentation

Note: Refer to the PDM Usage Guide harmonization results

214 should support specific document classification in symmetry to specific item classification

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Addressed by solution for issue #140

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 88

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-88	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

organization.type should be optional

Issue Description:

In AP214 ARM organization has a mandatory type attribute that maps into organization.description.

Organization.description is an optional attribute in the AIM schema. Orgamization type is ambigiuos and should

not be required in every data exchange scenario

There are many cases where the type of an organization is not relevant.

Proposed Solutions/Remarks:

make organization.type optional

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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accepted

Incorporated Solutions:

done as proposed.

Issue Reference No.: 89

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-89	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

Harmonization of values with AP203

Issue Description:

The AP214 ARM says that the role name 'actual' shall be used for a date_time_role specifying the assignment of date/time to approval_person_organization. This role name is already used for approval_date_time to specify the actual date of an approval. In AP203 it is recommended to use 'sign off' as role name in date_time_role for digital signatures.

One of the values defined in the permissive list for Person_organization_assignment.role is 'designer': The assigned Person or Organization is the one who delivers the data describing the referenced object (e.g., 3D models or drawings); AP203 defines for the same purpose a different value: design_supplier: identifies a person within an organization who is responsible for supplying the design of a part.

Proposed Solutions/Remarks:

harmonize with 203 and PDM Usage Guide -> use 'sign off'

Replace value 'designer' by 'design supplier'.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

use 'sign off' in the mapping and in the ARM 'sign_off_date' (from actual_date) --- wurde wieder rückgängig gemacht

accepted: design_supplier instead of designer in person_org._assignm. (4.2 and mapping change)

(see US-27) instead of actual as role for date_time_assignment for approval_person_org.

-> change mapping in date_and_pers_orgaization.actual_date or case + #2 to role 'sign off'

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 90

ISO/DIS 10303-214 – Issue log

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-90	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

date/org information for security classifications

Issue Description:

AP214 does not allow to assign date/org information to a security classification. This is an essential requirement

Proposed Solutions/Remarks:

Extension of select type needed

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

addressed by solution to issue #370

Incorporated Solutions:

security_classification added to general_org._data_select.

Issue Reference No.: 91

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-91	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

specifc item classification levels

Issue Description:

specific item classification shall be extended to include more than two levels of categories.

A distinction between detail and assembly should be mandatroy and included as a sub-category to 'part'

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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see #140 (ARM change)

need to specify that when a specification hierachy exsist, that the top level in the hierachy should be part, tool or raw_material

need to specify that there exists allways a classification as part, tool, or raw material of the item

merge PL of type and name to name

don't require mandatory assembly or detail as proposed in the issue description

Incorporated Solutions:

1) done as proposted.

2) done as proposted.

3) no action required.

after further discussion, specific_item_classification.classification was turned into a fixed list (ref. Note 2 in definition of AO).

values for specific_document_classification.classification_name (taken from AP212): catalogue; manual; specification.

Issue Reference No.: 92

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-92	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S6	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

general classification of features / Classification of Work_request

Issue Description:

the general classification mechanism shall be extended to allow for classification of feature definitions and feature occurrences.

The Eurofighter consortium has the requirement to classify work_requests.

Proposed Solutions/Remarks:

Include work_request, feATURE_Definition and feature_occurrence in the classified_element_select. Include versioned_action_request in classification_item SELECT.

BTW: all other work management objects are potential candidates for general classification (work_order, activity_methode, activity, contract, project)

Discussed Solutions:

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===

add feature_definition, general_feaure, thread_feature, and transition_feature

add also work_order, and acivity

work_request, shape_element also added (but resulting from a different issue)

Incorporated Solutions:

done as proposed.

Issue Reference No.: 93

Originator:	ProSTEP AP214 Team	**Date:**	09.04.1999
Country No.:	GER-93	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S5	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

renaming work_request.status

Issue Description:

The attribute work_request.status specifies ""... the status of the Work_request."" Thereby the recommended values (""in work""; ""issued""; ""proposed""; ""resolved"") reflect stages of the request. However, an assigned approval including approval_status may reflect the status of a request.

Proposed Solutions/Remarks:

The attribute work_request.status should be renamed into work_request.stage to avoid misunderstandings because status information shall be reflected by approval.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
===
accepted, but leave the attribute name and replace in the definition of the attribute status by stage.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 94

Originator:	ProSTEP AP214 Team	**Date:**	10.04.1999
Country No.:	GER-94	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

doc_element_select extended with activity_element

Issue Description:

There is no possibility to attach a document/document file to activity_element as necessary to map requirements within the Eurofighter project

Proposed Solutions/Remarks:

the document_element_select shall be extended with activity_element to may attach a document which e.g. describes how (an) associated element(s) is/are affected or to specifiy the link between the work management and the referenced elements more in detail via describing document(s)

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Resolution: reject unless to get an useful example

Max provided an explanation, that an a document assigned to activity_element provides further description of the input or output

=> Accepted

Incorporated Solutions:

added example to definition of attribute 'is_assigned_to'

Issue Reference No.: 95

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-95	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	137
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

AP 214 ARM, AO configuration.configuration_type, recommended values

Issue Description:

For Ap 214 ARM, AO configuration.configuration_type, recommended value in context with AO product_component is design. In context with Bill of Material this value does not apply.

Proposed Solutions/Remarks:

The issues request to allow the use of the recommended value "usage" also in context with product_component.

Discussed Solutions:

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WG1.3: find appropriate definition/example

Incorporated Solutions:

Definition incorporated.

Issue Reference No.: 96

ISO/DIS 10303-214 – Issue log

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-96	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	425
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

AP 214 ARM, AO specification_category, no hierarchy concept available

Issue Description:

In context with Product Coding Systems it is necessary to build hierarchies of specification_categories. AP 214 ARM offers not such concept.

Proposed Solutions/Remarks:

Include relation entity, to build specification_category hierarchies

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

is it just for grouping, what is with inheritance? use general_classification

porposol Höppö: in favor, apply effectivity, etc. on it to have a flexible mechanism

two options: 1. use general_classification, 2. simple hierarchy mechanism without inheritance.

go for option 2!

accepted, introduce specification_hierachy_relationship with attributes sub_category and super_category

Incorporated Solutions:

introduced specification_category_hierarchy with attributes sub_category and super_category.

Issue Reference No.: 97

Originator:	ProSTEP AP214 Team	**Date:**	13.09.1999
Country No.:	GER-97	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

Usage of application_protocol_definition

Issue Description:

Rule application_context_requires_ap_definition requires that each instance of application_context is referenced by an instance of application_protocol_definition. As this reference is not a SET (see issue mu-ProSTEP-GER-214-2), for each instance of application_context an instance of application_protocol_definition is required. Dependent on the number of application domains / life cycle stages a lot of application_protocol_definition instances (with the same attribute values) will exist in an data set.

This number will rather increase dependent from the approach taken for product_defintion_context used as type discriminator (see issue <PDM-UG???>).

Proposed Solutions/Remarks:

Relax the constraints. E.g., require that at least one instance of application_protocol_definition must exist in an data set.

Discussed Solutions:

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accepted. J. Mohrmann has drafted new code for WHERE rule

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 98

Originator:	ProSTEP AP214 Team	**Date:**	20.08.1999
Country No.:	GER-98	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	205
Related Part/UoF:	S4	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

Description of correspondence between effectivity_assigment.role and effectivity.secondary_definition incomplete

Issue Description:

In the definition of attribute role of AO effectivity_assignment is stated:

"If one of the values 'actual start', 'actual stop', 'planned start', or 'planned stop' is specified, no

secondary_definition shall be given in the assigned Effectivity."

This also applies to 'required start' and 'required stop'.

Proposed Solutions/Remarks:

Include 'required start' and 'required stop'.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

see JAMA-4 (#164) see #347 for the solution

Incorporated Solutions:

solved by # 347.

Issue Reference No.: 99

ISO/DIS 10303-214 – Issue log

Originator:	ProSTEP AP214 Team	**Date:**	24.08.1999
Country No.:	GER-99	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2982
Related Part/UoF:		**Clause:**	Annex_A
			Annex_H

Sentence/abstract/keywords:

Mismatch in AIM EXPRESS and EXPRESS-G

Issue Description:

In AIM diagram H.1, the attribute application of application_protocol_definition is represented as a set "application S[1:?]".

However, from the EXPRESS definition used from ISO 10303-41.2 the attribute is not a SET.

Proposed Solutions/Remarks:

Correct diagram H.1

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Do as proposed.

Incorporated Solutions:

Done as proposed

Issue Reference No.: 100

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-100	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S5	**Clause:**	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

introduce work definition as activity_type

Issue Description:

a work order is the approval portion of an activity. It should be made clear that for each work order exactly one work definition (as root) exists

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

no specific value needed due to recom. practices of PDM UG

remove set (to be one) and remove inverse (see Aufzeichnungen von J. Mohrmann)

Incorporated Solutions:

set removed

Issue Reference No.: 101

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-101	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	P3	**Clause:**	Cl. 4.1 (UoFs) , Clause_6

Sentence/abstract/keywords:

conformance classes of 214

Issue Description:

1.) hidden line handling is not part of cc04 in the perspective of the AIM schema, since camera_model_d3_with_hlsr is not included.

A 'conformance class for assembly drawings with wireframe, surface or solid shape representation' should include hidden line handling

2.) A majority of implementors have implemented CC2 scope excluding csg_model. To clearly state such an implementation and to distinguish that from csg implementations a conformance class having the scope of cc2 without CSG should be available.

3.) CAx implementors have implemented functionality based on item property to validate CC2 based file exchanges. To support such scenarios a class consiting of CC2 scope (without CSG) + item_property should be available

4.) CAx implementors have implemented functionality that allows to annotated 3D (styled) models. A corresponding conformance class extending CC2 scope (without CSG) with annotated_presentation shall be available

5.) A conformance class supporting 2.) and 3.) shall be available

6.) A number of CAx systems will impleneent the exchnage of included feature capability and annotated_presentation/draughting functionality based on CC11. In that context also e.g. roughness parameters need to be exchanged. CC11 should include surface_condition.

From implementors perspective it would be desireable to have CC11 work on all geometries supported by CC2, thus geometrically_bounded_surface_model shall be included in CC11. Many existing commercial processors export such geometry. CSG should be removed from CC11.

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

1.) hidden_element_handling:

since hlhsr functionality is contained in AP202 UoFs where AP214 CC4 conforms to, hidden_element_handling should go to CC4

2.) issue rejected based on definition of CC2 and to avoid creation of CCs based on all permutations of UoFs

3.) proposal to shift geometry related propoerties from PR1 to another UoF dealing with properties of geometry and add this to CC2. Will be shifted to S2 potentially (will be discussed in plenary).

4.) definition of new CCs and UoFs may have tremendous influence on rework of AP214 (mapping tables, review). Furthermore it would be impossible to define CCs representing the current status of implementation. This is a general problem which has to be discussed in the joint meeting.

5.)+6.) have to be discussed.

- in this context: check with Jürgen Mohrmann on additional definition of UoF covering "auxiliary information" like constructive geometry, geometry property, template mechanism, accuracy

Incorporated Solutions:

1) solved by # 135;

2) no action required;

3) solved by introduction of general_shape_dependent_property;

4) no action required;

5) constructive geometry et. al. are shifted to UoF S2

6) no action required.

Issue Reference No.: 102

Originator:	ProSTEP AP214 Team	**Date:**	09.09.1999
Country No.:	GER-102	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	G_1-8	**Clause:**	Cl. 4.1 (UoFs)
			Cl. 5.1 (Mapping tables) ,
			Clause_6

Sentence/abstract/keywords:

mapping of external model

Issue Description:

AP214 CC6 does in respect to geometric models only include external geometric models.

It is a common situation that models are geometrically combined, e.g. in an assembly context to reflect the geometry and the transformations involved in an assembly.

For leaf nodes in such geometric assemblies geometry always exists. This geometry is in the CC6 case represented in an external file.

But for intermediate nodes in the assembly such geometry does not necessarily exist. It is thus artificial that also in these cases the mapping of external_geometric_model does require a property_definition linking the model to a file - which does not really exist.

Proposed Solutions/Remarks:

a) include also geometric_model in CC6

b) modify the mapping with or-case that also allows for external models without associated file.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Option a) rejected, since all geometry structures should not go into CC6

Option b) approved. Proposal is to make external_model.is_defined_as optional and redeclare it as to be mandatory for external_picture and external_geometric_model_with_parameters.

Discussion in Plenary Session:

Remove (ABS) from Geometric_model to use Geomatric_model with only Axis_placements in.

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 103

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-103	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

permissive list values missing

Issue Description:

1: The predefined value .SUBSTITUTION. is missing as allowed value for the attribute relation_type of the AO product_class_relationship.

2: The predefined value .SUBSTITUTION. is missing as allowed value for the attribute relation_type of the AO product_component_relationship.

3: There are at least the following permissive list values needed in AP214 for the attribiute role of AO classification_association: .ENVIRONMENTAL_CONDITIONS., .ELECTROMAGNETIC_COMPATIBILITY.

4: There are at least the following to permissive list values needed in AP214 for attribute type of AO organization: company, department, plant. An example is not sufficient.

5: There is a difference between a creator and an author of a thing. The author owns the copyright, whereas the creator does not necessarily have the copyright. Therefore the permissive list value .AUTHOR. for attribute role of AO person_organization_assignment is missing.

6: The predefined value .MANAGEMENT_RESOLUTION. is missing as allowed value for the attribute work_order_type of the AO Work_order.

7: Consider to add the values .CATALOG. .MANUAL., and .SPECIFICATION. (originating form AP212) in addition to the original values in the new document approach (harmonized with AP232).

8: The predefined value .SUBSTITUTION. is missing as allowed value for the attribute relation_type of the AO document_version_relationship.

9: The attribute relation_type of the AO property_relationship is missing the permissive list values .SUBSTITUTION., .DECOMPOSITION., and .VALUE DOMAIN. for the attribute relation_type.

Proposed Solutions/Remarks:

1: Add the additional predefined value (see AP212 for a definition).

2: Add the additional predefined value (see AP212 for a definition).

3: Add the two missing permissive list values and adopt the definition given in AP212. This values might be also supplied in form of a note.

4: Add the three missing permissive list values and adopt the definition given in AP212. This values might be also supplied in form of a note.

5: Add permissive list value .AUTHOR. for attribute role of AO person_organization_assignment.

6: Add the additional predefined value.

7: Add the values .CATALOG. .MANUAL., and .SPECIFICATION. in addition to the original values in the new document approach.

8: Add the additional predefined value. See AP212 for a definition

9: Add the permissive list value. See AP212 for a definition

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

1.

2. add complex_product_relation in effective

3. 212 related, possibly remove it from the ARM (but ...!!!)

4.

5.

7.

8. no

9.

see ARM diagrams

Incorporated Solutions:

1) inserted

2) inserted

3)inserted

4), 5) 6) 7) done as proposed

8) rejected in workshop

9) done as proposed

Issue Reference No.: 104

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-104	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

permissive list required

Issue Description:

1: The attribute condition_type of the AO Class_Condition_Association needs to define a permissive list of predefined values rather than a fixed list.

2: The attribute relation_type of the AO approval_relationship needs to define a permissive list of predefined values rather than nothing.

3: The attribute relation_type of the AO activity_method_assignment provides only a fixed list of predefined values.

4: The attribute relation_type of the AO property_value_relationship needs to define a permissive list of predefined values rather than providing only an example.

Proposed Solutions/Remarks:

1: Change the fixed list of predefined values into an permissive list.

2: Introduce a list of predefined values and add an appropriate explanation (see AP212)

3: change it to an permissive list of predefined values.

4: Introduce a list of predefined values .DEPENDENCY., .DECOMPOSITION., .SUBSTITUTION., and .EQUIVALENCE. and add an appropriate explanation. See AP212 for a definition (AO data_element_relationship). For the value .EQUIVALENCE. an example could be given where two property_values are equivalent when having different values and different units (e.g. 1 km and 1000 m).

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

ok, all accepted!

Incorporated Solutions:

1. done as proposted.

2. done as proposted.

3. done as proposted.

4. done as proposted.

Issue Reference No.: 105

ISO/DIS 10303-214 – Issue log

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-105	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

optional attribute missing

Issue Description:

1: Since the AO alternative_solution is not abstract, there is a need to describe the kind of an alternative_solution.

2: The AO physical_instance has no attribute able to store the information about inventory number. The usage of the AO alias_identification for this purpose is not satisfactory.

Proposed Solutions/Remarks:

1: Add an optional attribute ""description""

2: Add an optional attribute inventory_number to the AO physical_instance and use the mapping specified in AP212 for this attribute.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

1. rejected (because of mapping problems)

2. accepted

Incorporated Solutions:

1) no action required.

2) added attribute inventory_numbers to AO physical instance.

Issue Reference No.: 106

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-106	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S3	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

attribute assembly_type to be optional

Issue Description:

The information about an type of an assembly (AO assembly_definition) is no always present.

Proposed Solutions/Remarks:

change the attribute ""assembly_type"" to be optional

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

accepted

Incorporated Solutions:

done as proposted, attribute made OPTIONAL.

Issue Reference No.: 107

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-107	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

definitions misleading, clarification needed for permissive list values

Issue Description:

1: The semantics of the permissive list value .SUCCESSION. for attribute relation_type of AO organization_relationship is not clear.

2: The definition of permissive list value .TRANSLATION. of attribute relation_type of AO document_structure is misleading.

Proposed Solutions/Remarks:

1: Improve the explanation (In German: ""Rechtsnachfolger"").
2: Modify the definition according to AP212

Discussed Solutions:

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===

1. add legal prior to successor . Add third PLV "reorganization", reflects internal changes to a department etc. Add example that the name of a department changes.: Definition: The related organisation is the successor of the relating organization based on an company internal reorganization.

2. accepted, use the AP212 definition, also the same for AO document file relationship

Incorporated Solutions:

1) added legal prior to successor, example added

2) definitions for PLV Translation for the attribute relation_type of AO document_structure and document_file_relationship changed according to AP212.

Issue Reference No.: 108

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-108	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

The relevant address of a person needed

Issue Description:

The relevant address of a person, i.e. the address of a person where he can reached is not necessarily the same as the office location (attribute address of AO person)

Proposed Solutions/Remarks:

add attribute location for AO person and provide a corresponding explanation (see AP212 for a definition).

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Add opt. attribute location to person_in_organization. move the id attribute from AO person to AO person_in_organization. keep the attribute address of AO person as the preffered address

AIM solution depends on solution of 41 Issues

Incorporated Solutions:

done as proposted.

Issue Reference No.: 109

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-109	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S6	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

wrong value in mapping rule

Issue Description:

In the mapping rule for the AO PLIB_class_reference the value 'ISO 13684 library' is given instead of 'ISO 13584 library'

Proposed Solutions/Remarks:

change the wrong value to the correct value.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision: Correct typo as proposed.

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 110

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-110	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S5	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

wrong attribute type

Issue Description:

The type of the attribute role_of_organization of the AO organization_in_contract is of type string_select instead of type STRING.

Proposed Solutions/Remarks:

change the type of the attribute.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

accepted

Incorporated Solutions:

Changed to STRING.

Issue Reference No.: 111

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-111	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S5	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

rename attribute and change mapping

Issue Description:

The attribute ordered_price of AO contract seems has a very specific and therefore restricted meaning.

Proposed Solutions/Remarks:

Change the attribute name into description and map it onto the AIM attribute contract.purpose (like in AP212). Add an example explaining that the description attribute can be used to store the information about the ordered price.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

accepted

Incorporated Solutions:

renamed to 'description', see # 326.

Issue Reference No.: 112

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-112	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

examples for permissive list values needed.

Issue Description:

1: example for permissive list vale .REFERENCE. of attribute relation_type of AO document_structure missing missing.

2: An example for permissive list vale .DERIVED. for the attribute relation_type of AO document_structure explaining that this value could be used for alternatives is missing.

Proposed Solutions/Remarks:

1: Add an example explaining that e.g., a hyperlink is an example for the use of the value .REFERENCE.

2: Add an example explaining that the related and the relating document representations might be alternatives.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

accepted

Incorporated Solutions:

1) done as proposed

2) added note for document_file_relationship.relation_type, that the list values 'addition', 'composition', and 'peer' shall not be used if document_file is referenced by a document_representation object

Issue Reference No.: 113

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-113	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

use of official designators

Issue Description:

1: Currently, nicknames are used as values for the attribute data_format of the AO document_format_property. This is not satisfactory.

2: Currently, nicknames are used as values for the attribute character_code of the AO document_format_property. This is not satisfactory. In addition, there are permissive list values missing.

Proposed Solutions/Remarks:

1: Use the official designators for the values of the attribute data_format (where appropriate), such as 'ISO 10303-213' instead of 'STEP AP203'.

2: Use the official designators for the values of the attribute character_code (where appropriate), such as 'ISO 8859-1' instead of 'ISO LATIN-1'. Consider to add the permissive list values defined in AP212 (like 'ISO 646', 'ISO 3098-1', etc.)

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

1. Accepted

2. Accepted

Incorporated Solutions:

1. done as proposted.

2. Done where applicable.

Issue Reference No.: 114

ISO/DIS 10303-214 – Issue log

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-114	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

use of language codes instead of strings

Issue Description:

For specifying the language of the content of a document, the use of language strings is not satisfactory.

Proposed Solutions/Remarks:

use language codes (ISO 639) instead of strings (see AP212). Rename the attribute languages to language_codes.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Proposal:

1. Merge language_code and country_code in one attribute

2. Create a seperate entity (e.g. called language) two attributes and country_code

Preference:

 - one attribute (Jap, Swe,

 - new entity type (Fra, Ger, USA, ...

Resolution: Introduce new enttity type "language" and change the ARM EXPRESS-G (see Figure from Mohrmann)

Incorporated Solutions:

introduced to language and refer to it as S[0:?]

Issue Reference No.: 115

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-115	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S6	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

wrong path in mapping table

Issue Description:

the non existing attribute assigned_class is used

Proposed Solutions/Remarks:

use classification_assignment.assigned_classification instead of classification_assignment.assigned_class

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision: Correct mapping path as proposed

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 116

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-116	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S6	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

wrong mapping for AE classification_attribute

Issue Description:

The use of a name_assignment instead of using an identification_assignment seems to be more appropriate

Proposed Solutions/Remarks:

1st: consider to use the name_assignment for the mapping of the AE classification_attribute.name. 2nd: use id_assignment for mapping of the id attribute and the .name AIM attribute for the .name ARM attribute

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision:

1. Address issue

2. Remap based on solution to Part41.2 issue GER-41.2-4

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 117

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-117	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S6	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

wrong reference path for AE general_classification_hierachy

ISO/DIS 10303-214 – Issue log

Issue Description:

see Abstract

Proposed Solutions/Remarks:

use the reference path as specified in AP212 for the AE classification_hierachy

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision: Check with AP212 and correct it.

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 118

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-118	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S6	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

rename size_in_x and size_in_y to width and height.

Issue Description:

It is not clear, if the attribute size_in_x specifies the height or width of a sheet size, and if the attribute size_in_y specifies the width or height of a sheet size.

Proposed Solutions/Remarks:

rename both attributes in height and width and give appropriate definitions.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

accepted, change the definition

Incorporated Solutions:

done as proposed.

size_in_x -> width

size_in_x -> height

definitions changed

Issue Reference No.: 119

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-119	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S5	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

simultaneous_activity is a acitvity_relationship

Issue Description:

The concept of simultaneous_activity can be represented by the concept activity_relationship. Both AO are present in AP214.

Proposed Solutions/Remarks:

represent the concept of simultaneous_activity as a series of activity_relationship's and add the permissive list value .SIMULTANEITY. for the attribute relation_type of the AO activity_relationship (see AP212). Remove the AO simultaneous_activity.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision: Change ARM, for consistency apply to simultaneous_process_operation and exclusive_process_operation, too:

1. Delete AOs simultaneous_activity, exclusive_process_operation, simultaneous_process_operation

2. Add value 'simulteinity' to activity_relationship.relation_type permissive list

3. Add values 'simulteinity', 'exclusiveness' to process_operation_relationship.relation_type permissive list

4. Add OPTIONAL attribute cycle_time to process_operation_relationship

Incorporated Solutions:

ARM and mapping changed as proposed. Simultaneous activities reflected by action_relationships with action_relationship.name = 'simultaneity'.

Issue Reference No.: 120

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-120	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

harmonize mapping table with AP212

Issue Description:

There are differences and discrepancies in the mapping of AP214 and AP212 for those AOs, that have the same meaning in both APs. Therefore the mapping of these AO (including attributes) should be harmonized, e.g., same reference paths, same mapping rules

Proposed Solutions/Remarks:

harmonize mappings. Use the AO counterpart-table as a guideline.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision:

Mapping will be harmonized as proposed.

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 121

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-121	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

elements of select types missing

Issue Description:

1: The select type classified_element_select is missing some elements that have counterparts in AP212.

2: The select type item_property_select is missing some elements that have counterparts in AP212.

3: The select type alias_select is missing some elements that have counterparts in AP212.

4: The select type date_time_person_organization_element_select is missing some elements that have counterparts in AP212.

5: The select type activity_element_select is missing some elements that have counterparts in AP212.

6: The select type effectivity_element_select is missing some elements that have counterparts in AP212.

7: The select type approval_element_select is missing some elements that have counterparts in AP212.

8: The select type documented_element_select is missing some elements that have counterparts in AP212.

Proposed Solutions/Remarks:

1: add the AOs property_value, desing_discipline_item_definition, single_instance, and item_version to the select type

2: add the AOs activity, and alternative_solution_relationship to the select type

3: add the AOs classification_attribute, and design_discipline_item_definition to the select type

4: add the AOs activity_method_assignment, alternate_item_relationship, complex_product_relationship, general_classification, contract, data_element, item_version_relationship, security_level and security_classification to the select type

5: add the AOs alternate_item_relationship, property_value, property_value_relationship, and design_discipline_item_definition to the select type

6: add the AOs property_value, property_value_relationship, item_version, physical_instance, and physical_assembly_relationship to the select type

7: add the AOs contract, property_value, and property_relationship to the select type

8: add the AOs property_value, item, item_version, organization, person, and security_classification to the select type

Discussed Solutions:

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===

1. add property_value_association, remove property_value_rep, add item_version, ddid, item

2. not accepted

3. accepted

4. accepted: activity_

   question:

    no: property_value_repr.,

5. ddid, alternative_item_rel.

    unclear: property_...

6. unclear: property_..., physical_instance_...,

   accepted: process_operation_ressource_assignment, unclear

7. ...

8. ...

see new ARM diagramms

Incorporated Solutions:

done as proposed

Issue Reference No.: 122

Originator:	Guenter Staub, PDTec, staub@pdtec.de	**Date:**	23.08.1999
Country No.:	GER-122	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	PR1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

harmonization with AP212 in the area of properties

Issue Description:

there are still some discrepancies in the area of properties.

ISO/DIS 10303-214 – Issue log

Proposed Solutions/Remarks:

In the mapping of the AE property_value.value_determination, introduce the following mapping rule {representation_item.name = 'value interpretation'}. Use 'minimum' and maximum' instead of 'min' and 'max' for the permissive list values of the attribute limit of AO value_limit. Consider to introduce a property_association_context_select with the following elements: organization, product_class, and product_identification. Give examples about configurable components (e.g. such as software) that can be used in different product_classes with different parameter values. Add the permissive list value .SETPOINT. to the permissive list provided for the attribute value_determination of AO property_value. See AP212 for a definition. Rename the AO property_value into property_value_representation. Introduce a new AO called property_value, which is an abstract supertype of value_list, value_with_unit, and descriptive_value. Descriptive_value itself is also an new AO having one attribute called value of type string_select. Move the attribute value_name from the AO property_value to the new AO property_value_representation. The existing attribute values of the AO value_list is now pointing to the new AO property_value_representation. The AO property_value_association should be abstract (ABS). Consider to add an optional version_id. Consider to add an new AO qualified_value as subtype of value_with_unit (with attribute value_component and attribute qualifier, which is a fixed list with values of .TYPICAL. and .SPECIFIED.)

Discussed Solutions:

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===
accpeted, see new ARM diagram
use in the definition of .SETPOINT. the phrase "... initialization value ..."
use string_value instead of descriptive_value (with the same capabilities as in AP212)

Incorporated Solutions:

done as proposed.
See ARM diagrams and definitions of property, property_value_representation, property_value & related application objects.

Issue Reference No.: 123

Originator:	Anna Wasmer, PDTec, wasmer@pdtec.de	Date:	23.08.1999
Country No.:	GER-123	Issue status:	accepted, Closed
Urgency:	major	Type:	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	
Related Part/UoF:	S4	Clause:	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

harmonize mapping in the effectivity area and work management area with the PDM schema.

Issue Description:

There are interoperability problems in the effectivity area and the work management area of AP214 with the PDM schema.

Proposed Solutions/Remarks:

Harmonize the mapping of the effectivity area and the work management area with the PDM Usage Guide

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision:

1. Addressed by solution to issues #54, #164 (ARM and mapping changes)

2. Check for Usage Guide to be align with the proposed changes.

Incorporated Solutions:

Mappings have been harmonized with PDM schema usage guide (addressed by solution to issues #54, #164, ARM and mapping changes).

Issue Reference No.: 124

Originator:	Martin Philipp, DiK, philipp@dik.tu-darmstadt.de	**Date:**	17.09.1999
Country No.:	GER-124	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.238
Related Part/UoF:	T2	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

Clarification of tolerancing method

Issue Description:

There are two types of tolerancing methods that are known: the ideal shape approach and the skin model approach. It should be clarified that the ideal shape approach is taken in AP214.

Proposed Solutions/Remarks:

Add to definition of application object geometric_tolerance a sentence as follows: 'Geometric tolerances are used in the context of an intermediate shape, where the maufacturing defects are considered and constrained with respect to the ideal shape of the part.'

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

- add sentence to definition of UoF T2 rather than to individual objects

Incorporated Solutions:

added sentence

'The tolerances are defined relative to the ideal shape of the toleranced object.' as 2. paragraph of definition of UoF T2.

done as proposted.

Issue Reference No.: 125

Originator:	Martin Philipp, DiK, philipp@dik.tu-darmstadt.de	**Date:**	17.09.1999
Country No.:	GER-125	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	T2	**Clause:**	Cl. 4.2 (ARM) ,

Sentence/abstract/keywords:

differences in textual definitions of types of geometric tolerances

Issue Description:

The definitions of the ARM objects and the corresponding objects in AIC 519 differ to a large extent.

Proposed Solutions/Remarks:

Check, whether it is feasable to copy definitions from AIC 519 into AP214. If necessary, add terms specific to these definitions to clause 3 and add source standards to clause 2.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Check throuhg the definitions from AP214 asnd AIC519. Where big discrepancies are encountered, definition from AIC519 should be used in AP214.

Incorporated Solutions:

done as proposted.

-Updated the following AO's:

-circular_runout_tolerance

-cylindricity_tolerance

-flatness_tolerance

-line_profile_tolerance

-straightness_tolerance

-rephrased text for attribute referenced_datum to fit use of SET in all relevant places.

Issue Reference No.: 126

Originator:	Martin Philipp, DiK, philipp@dik.tu-darmstadt.de	**Date:**	17.09.1999
Country No.:	GER-126	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.83
Related Part/UoF:	T2	**Clause:**	Cl. 5.1 (Mapping tables) Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

Mapping change

Issue Description:

In practice, the cardinality between compound_datum and single_datum is always 2. Thus compound_datum to single_datum as is_made_up_by should be changed to SET[2:2]

Proposed Solutions/Remarks:

Change cardinality as described and consequently, change mapping of compound_datum to common_datum of AIC519.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

- Change cardinality as described.

- Change mapping as described.

- Submit FDIS issue against AIC519 in order to enhance definition of common_datum by example of its usage.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 127

Originator:	Martin Philipp, DiK, philipp@dik.tu-darmstadt.de	**Date:**	17.09.1999
Country No.:	GER-127	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.238, 4.2.15, 4.2.330, 4.2.336
Related Part/UoF:	T2	**Clause:**	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

Shift attribute segment_size to common supertype geometric_tolerance.

Issue Description:

According to ISO 1101, all types of tolerances may specify segment sizes.

Proposed Solutions/Remarks:

Remove attribute segment_size from angularity_tolerance, parallelism_tolerance, and perpendicularity_tolerance, and add this attribute to geometric_tolerance.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Do as proposed.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 128

Originator:	Martin Philipp, DiK, philipp@dik.tu-darmstadt.de	**Date:**	17.09.1999
Country No.:	GER-128	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	04.02.64
Related Part/UoF:	T2	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Rename application object circularity_tolerance

Issue Description:

In ISO 1101, instead of circularity the term roundness is used.

Proposed Solutions/Remarks:

Rename application object circularity_tolerance to roundness_tolerance, and correct mapping table according to AIC 519.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Do as proposed.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 129

Originator:	Martin Philipp, DiK, philipp@dik.tu-darmstadt.de	**Date:**	17.09.1999
Country No.:	GER-129	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.290
Related Part/UoF:	T2	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Proposal for second method of tolerancing

Issue Description:

line profile tolerances may be specified using a plane or actual intersection curves between a plane and the piece part.

Proposed Solutions/Remarks:

In order to reflect this capability, add to definition of assertion line_profile_tolerance to reference_plane as affected_plane '... the plane or one of the intersection curves ...'. Add a SELECT type composed of types curve

and reference_plane, and add or-case in mapping for shape_aspect_relationship.name = 'resulting intersection curve association'. Rename assertion to reference_shape.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Issue rejected, since information on curve can be derived by knowing the plane information.

Incorporated Solutions:

no action required.

Issue Reference No.: 130

Originator:	Martin Philipp, DiK, philipp@dik.tu-darmstadt.de	**Date:**	17.09.1999
Country No.:	GER-130	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.336, 4.2.484
Related Part/UoF:	T2	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Change cardinality of assertions

Issue Description:

The cardinality of the assertions perpendicularity_tolerance and symmetry_tolerance to datum (as reference_datum) is wrong.

Proposed Solutions/Remarks:

Change both cardinalities from 1 to SET[1:3].

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

- Isse is based on AIC519 information.

- Do as proposed.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 131

ISO/DIS 10303-214 – Issue log

Originator:	Martin Philipp, DiK, philipp@dik.tu-darmstadt.de	Date:	17.09.1999
Country No.:	GER-131	Issue status:	accepted, Closed
Urgency:	major	Type:	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	
Related Part/UoF:	T2	Clause:	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Missing type of tolerance

Issue Description:

The tolerance of type coaxiality as defined in ISO 1101 is missing in the ARM.

Proposed Solutions/Remarks:

Add appication object coaxiality_tolerance as follows: ENITIY coaxiality_tolerance SUBTYPE OF (geometric_tolerance); reference_datum: SET [1:2] of datum; END_ENTITY; coaxiality_tolerance: 'A coaxiality_tolerance is a type of geometric_tolerance. It constrains a condition, where two or more axes shall lie within a cylinder, the diameter of which is defined by the tolerance value.' reference_datum: 'The reference_datum specifies the single_datum or compound_datum that defines the reference for this type of geometric_tolerance.'

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
==
Do as proposed.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 132

Originator:	Martin Philipp, DiK, philipp@dik.tu-darmstadt.de	Date:	20.09.1999
Country No.:	GER-132	Issue status:	accepted, Closed
Urgency:	major	Type:	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	
Related Part/UoF:		Clause:	Cl. 4.1 (UoFs) , Clause_6
Sentence/abstract/keywords:			

truncated assertions and supertype tree in various conformance classes

Issue Description:

While checking the consistency of the 19 conformance classes of AP214 on the ARM level, two types of problems were identified: a) mandatory assertions in the ARM, where the target ARM object is not participating in the actual conformance class; b) a supertype of an ARM object is not participating in the actual conformance class.

Proposed Solutions/Remarks:

For solving type a) problems, see table 1: table 1: problems with assertions source object application object solution MODEL_CHANGE(S2) CHANGE add CHANGE to UoFs S2, S5, PR1 VECTOR_APPEARANCE(P1) TERMINATOR_SYMBOL add TERMINATOR_SYMBOL to UoF P1 POINT_APPEARANCE(P1) POINT_MARKER_SYMBOL add POINT_MARKER_SYMBOL to UoF P1 (see terminator_symbol) PHYSICAL_INSTANCE_TEST_RESULT(PR1) PHYSICAL_INSTANCE move PHYSICAL_INSTANCE_TEST_RESULT to UoF S7 EXTERNAL_MODEL_WITH_PARAMETERS(E1) PROPERTY_VALUE (PR1) include UoF PR1 in CC2, CC4, CC5 table 2: problems with supertype tree subtype application_object solution ITEM_INSTANCE(S3) PRODUCT_CONSTITUENT add PRODUCT_CONSTITUENT to S3 MATED_ITEM_ASSOCIATION(S8) ITEM_DEFINITION_INSTANCE_RELATIONSHIP add ITEM_DEFINITION_INSTANCE_RELATIONSHIP to S8 MAKE_FROM_RELATIONSHIP(S8) ITEM_DEFINITION_INSTANCE_RELATIONSHIP add ITEM_DEFINITION_INSTANCE_RELATIONSHIP to S8, see mated_item_association SAME_TIME_MASCHINING_RELSHIP(S8)ITEM_INSTANCE_RELATIONSHIP add ITEM_INSTANCE_RELATIONSHIP to S8 TEMPLATE_INSTANCE(E1) DETAILED_MODEL_ELEMENT add DETAILED_MODEL_ELEMENT to E1

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

model_change => change additonal in S2 and in PR1

vector_appearance => terminator_symbol in P1

point_appearance => point_marker_Symbol in P2

physical_instance_test_result => move from PR1 to S7

mated_item_association => item_def_inst_rel additionally in S8

same_time_machining_relationship =>

template_instance => item_instance_relationship add. in S8

                       detailed_model_element additionally in E1

Group 1: property_value => PR1 in CC2, CC4, CC5 ?

Group 1: item_instance (subtype of product_constituent) => product_constituent in S3 ?

Incorporated Solutions:

model_change => change additonal in S2 and in PR1 ->o.k.

vector_appearance => terminator_symbol additional in P1 ->o.k.

point_appearance => point_marker_Symbol additional in P2 ->o.k.

physical_instance_test_result => move from PR1 to S7 ->o.k.

mated_item_association => item_def_inst_rel additionally in S8 ->o.k.

same_time_machining_relationship => item_def._inst._rel. additionally in S8 ->o.k.

template_instance => item_instance_relationship add. in S8 ->o.k. ->o.k.

                       detailed_model_element additionally in E1 ->o.k.

property_value => PR1 in CC2, CC4, CC5 ? moved geometric_model_with_parameters to PR1

item_instance (subtype of product_constituent) => product_constituent in S3 ? Done as proposed

Issue Reference No.: 133

Originator:	Wolfgang Haas	**Date:**	03/10/1999
Country No.:	GER-133	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	P1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Include product_definition_formation in presented_item_select

Issue Description:

For harmonization with AP202, include product_definition_formation in presented_item_select. In the ARM this leads to the following:

include item_version in presentation_annotation_select, add two new assertions: in UoF D1 drawing_assignment to item_version (as is_desrcibing) and in UoF P1 view_area_assignment to item_version (as is_describing).

Proposed Solutions/Remarks:

Check with useres, if this is acceptable. If yes, add item_version to presentation_association_select and add mapping in UoF P1 view_area_assignment and UoF D1 drawing_assignment.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

- do as proposed, since in specific cases an instance of item and item_version without an instance of design_discipline_item_definition may exist, where a draughting should be assigned to

- add example on that specific case in clause 4.2

Incorporated Solutions:

done as proposed, example added. added mapping in drawing_assignment in D1 and view_area_association in P1

Issue Reference No.: 134

Originator:	Wolfgang Haas	**Date:**	03/10/1999
Country No.:	GER-134	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.1 (UoFs) , Clause_6
Sentence/abstract/keywords:			

Request for contract related entities to be included in CC4

Issue Description:

In AP202 there the same or corresponding entities. They are in all conformance classes of AP202 but missing in the draughting related conformance class 4 of AP214. However drawings may be subject of contracts.

Currently, contract is in UoF S5 (work_management), whioch is not included in CC4

Proposed solution: Include the above mentioned entities in conformance class 4 of AP214.

This can be archived in one of the following ways:

-add application objects contract and organization_in_contract (since there is an INVERSE constraint) to UoF

S1. This adds contract, contract_assignment, applied_contract_assignment and contract_item to CCs 1-5, 11-17)

-add UoF S5 to CC4, this would add the application objetcs as well:

Activity;

Activity_element;

Activity_method;

Activity_method_assignment;

Activity_relationship;

Change;

Contract;

Element_delivery;

Organization_in_contract;

Organization_relationship;

Project;

Project_relationship;

Simultaneous_activity;

Work_order;

Work_request.

Proposed Solutions/Remarks:

Check options with users.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

accepted, move AOs contract and organization_in_contract into S1

Incorporated Solutions:

done as proposed.

Issue Reference No.: 135

Originator:	Wolfgang Haas	**Date:**	03/10/1999
Country No.:	GER-135	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	P1	**Clause:**	Cl. 4.1 (UoFs) , Clause_6
Sentence/abstract/keywords:			

context_dependent_over_riding_styled_item requested for CC4

Issue Description:

In AP202 the entity context_dependent_over_riding_styled_item is in all conformance classes but it is missing in the draughting related conformance class 4 of AP214.

Proposed Solutions/Remarks:

Include the above mentioned entity in conformance class 4 of AP214.

This can be achieved by adding application object hidden_element_handling (currently only in UoF P3) to UoF P1 or P2 (P2 is used only in CCs, where P1 is used as well).

Discuss with users and add application object hidden_element_handling either in UoF P1 or P2.

Discussed Solutions:

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- add hidden_element_handling to P1

Incorporated Solutions:

done as proposed.

Issue Reference No.: 136

Originator:	Mike Strub, EDS, mike.strub@eds.com	**Date:**	August 26, 1999
Country No.:	USA-1	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1757
Related Part/UoF:	T1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

angular_size_dimension.full, dimensional_size.name

Issue Description:

AIM element is listed as representation_item.name. However, the reference path doesn't include this entity and attribute, but instead shows angular_size <= dimensional_size, then assigns values to dimensional_size.name.

Proposed Solutions/Remarks:

The mapping table should be corrected by changing the AIM element column entry for this row to read dimensional_size.name.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Do as proposed, i.e. substitute representation_item.name to dimensional_size.name.

Incorporated Solutions:

Corrected AIM element and source column.

Issue Reference No.: 137

Originator:	Mike Strub, EDS, mike.strub@eds.com	**Date:**	August 26, 1999
Country No.:	USA-2	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1765
Related Part/UoF:	T1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

dimensional_size, shape_aspect, geometric_dimension to value_with_unit

Issue Description:

Reference path lines 4 and 5 erroneously assert that dimensional_size is a subtype of shape_aspect

Proposed Solutions/Remarks:

Reference path should say that dimensional_size.applies_to points to shape_aspect.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Take another mapping approach as documented in solution for #68.

Incorporated Solutions:

no action required. solved by #68.

Issue Reference No.: 138

Originator:	Mike Strub, EDS, mike.strub@eds.com	**Date:**	August 26, 1999
Country No.:	USA-3	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1765
Related Part/UoF:	T1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Words transposed

Issue Description:

Mapping Table T1, application element GEOMETRIC_DIMENSION, mapping for relationship to

VALUE_WITH_UNIT (as dimension_value) provides mappings for 4 ARM cases:

#1 If the geometric_dimension is a size_dimension

#2 If the geometric_dimension is a location_dimension

#3 If the value is a nominal_value or a value_limit

#4 If the value is a value_range. The words "size_dimension" and "location_dimension" transposed.

ISO/DIS 10303-214 – Issue log

Proposed Solutions/Remarks:

The words "size_dimension" and "location_dimension" transposed. Here they are corrected:

#1 If the geometric_dimension is a location_dimension

#2 If the geometric_dimension is a size_dimension

#3 If the value is a nominal_value or a value_limit

#4 If the value is a value_range.

Discussed Solutions:

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==

Adapt the mapping tables as proposed.

Incorporated Solutions:

Done as proposed, see issue #68.

Issue Reference No.: 139

Originator:	Mike Strub, EDS, mike.strub@eds.com	**Date:**	August 26, 1999
Country No.:	USA-4	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1765
Related Part/UoF:	T1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

representation_item, geometric_dimension, global units, significant digits

Issue Description:

Mapping Table T1, application element GEOMETRIC_DIMENSION, mapping for relationship to VALUE_WITH_UNIT (as dimension_value) provides mappings for 4 ARM cases, which I have already corrected here assuming that issue EDS-3 is resolved as I suggested in the PROPOSED SOLUTION for it:

#1 If the geometric_dimension is a location_dimension

#2 If the geometric_dimension is a size_dimension

#3 If the value is a nominal_value or a value_limit

#4 If the value is a value_range.

The representation_item entity and, in some cases, its subtypes, as required by these mappings in the AIM, are as follows:

#1 representation_item

#2 representation_item

#3 representation_item AND measure_representation_item

#4 representation_item AND compound_representation_item AND value_range

These mappings fail to account for:

a) the need for the mapping to also be to a value_representation_item when units are globally assigned using the reference path representation_item <- representation -> representation_context => global_unit_asigned_context -> unit; and

b) the case that when there are significant digits or a value_determination, it is necessary to add a mapping to the qualified_representation_item subtype as well.

Proposed Solutions/Remarks:

I propose the following clarification of the ARM cases:

#1: If the geometric_dimension is a location_dimension

#2: If the geometric_dimension is a size_dimension

#3: If the unit is specified globally

#4: If the unit is not specified globally

#5: If the corresponding value_with_unit is a value_range

#6: If significant digits or value determination are given and that they map with the following reference path, (which includes blank lines for clarity):

#1: (dimensional_location <= shape_aspect_relationship shape_aspect_relationship.relating_shape_aspect ->)

#2: (dimensional_size dimensional_size.applies_to ->) shape_aspect shape_definition = shape_aspect characterized_definition = shape_definition characterized_definition <- property_definition.definition property_definition represented_definition = property_definition represented_definition <- property_definition_representation.definition property_definition_representation property_definition_representation.used_representation -> representation

#3: {representation.context_of_items -> representation_context => global_unit_assigned_context} representation.items[i] -> representation_item => #3: ([value_representation_item] #5: ([compound_representation_item => value_range]) #6: ([qualified_representation_item])) #4: ([measure_representation_item] #5: ([compound_representation_item => value_range]) #6: ([qualified_representation_item])) As a result of applying the modified mapping correspondence shown above, the following consequences should result: ARM representation_item and/or subtypes in AIM: ----------------------- -------------------- --- (case 3 above): There is no ARM way of stat- ing that global units will be used. But if they representation_item AND are to be used in the AIM by invoking the AIM value_representation_item entity GLOBAL_UNIT_ASSIGNED_CONTEXT: (case 4 above): Converseley, if the AIM will not be universally assigning the unit for values representation_item AND by using the entity measure_representation_item GLOBAL_UNIT_ASSIGNED_CONTEXT: (lack of case 5): VALUE_WITH_UNIT representation_item (only) is a nominal_value or a value_limit (case 5 above): VALUE_WITH_UNIT representation_item AND is a value_range compound_representation_item => value_range (case 6 above): PLUS_MINUS_BOUNDS has significant_digit attribute populated OR representation_item AND has value_determination attribute populated qualified_representation_item (lack of case 6): PLUS_MINUS_BOUNDS has neither significant_digits nor a representation_item (only) value_determination Finally, it should be noted that the above conditions are additive, resulting in more than one corresponding AIM condition applying simultaneously under combinations of the ARM conditions. The exact ways that the cases may be combined is as follows: (1 OR 2) AND (3 OR 4) ANDOR (5 OR 6). Selection of either case 1 or 2 doesn't influence the use of representation_item or any subtypes, because both cases require representation_item. But the additional selection of (3 OR 4) ANDOR (5 OR 6) may compound subtypes of representation_item with itself. For example: (3 AND 5) VALUE_WITH_UNIT representation_item AND is a value_range compound_representation_item => value_range AND AND global units will be used value_representaion_item

Discussed Solutions:

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Issue solved by change of the mapping (see #68). Proposed additional OR-Cases do not occur in the new mapping approach

Incorporated Solutions:

no action required. See #68.

Issue Reference No.: 140

Originator:	Jim Kindrick	**Date:**	
Country No.:	USA-5	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.450
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

specific_item_classification is only applied to items

Issue Description:

specific_item_classification is only applied to items (e.g. parts), should also be applied to documents realized by the 'document as product' approach. This is appropriate for the type classification of a document (see issue USA-214DIS-04).

Proposed Solutions/Remarks:

apply specific_item_classification to 'document as product' as is done in the PDM schema to support document type classification at the level of document, rather than document representation.

Discussed Solutions:

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accepted, add an text for the AO specific_item_classification, that the specific criteria is covered in the classification_name attribute. This also applies for the specific_document_classification.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 141

Originator:	Jim Kindrick	**Date:**	
Country No.:	USA-6	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.139.3
Related Part/UoF:	S1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

'primary' application context needed

Issue Description:

mapping of design_discipline_item_definition.is_relevant_for using product_definition_context_association rather than product_defintion.frame_of_reference.

Proposed Solutions/Remarks:

describe a 'primary' application context that is the defining context mapped via product_defintion.frame_of_reference, allow other additional relevant contexts to be associated via the product_definiton_context_association as is done in the PDM schema.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Addressed by solution to issue #84

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 142

Originator:	Jim Kindrick	**Date:**	
Country No.:	USA-7	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.265
Related Part/UoF:	S3	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

mapping of item_instance in UoF S7 is not consistent with the mapping in S3

Issue Description:

mapping of item_instance in UoF S7 is not consistent with the mapping in S3.

Proposed Solutions/Remarks:

map the concept the same in S7 as in S1. Introduce new AIM construct to allow the realization product structure relationship to be represented between a product constituent and an item instance.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Adressed by solution on issue #362.

Incorporated Solutions:

Addressed by solution to issue #362.

Issue Reference No.: 143

Originator:	Jim Kindrick	**Date:**	
Country No.:	USA-8	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.163
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

document_type property applied to document representation is not at the proper level

Issue Description:

document_type property applied to document representation is not at the proper level. The type of a document should be the same for all representations of all versions of a particular document. Assignment of the type property should therefore be at the level of document, not document version or document representation.

Proposed Solutions/Remarks:

apply specific_item_classification to document as product as is done in the PDM schema and use this for the requirement of type classification for the 'document as product' approach (see issue USA-214DIS-01). Please see 15 issues described below.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Resolution: introduce dual approach (specific classification for documents and products, use the permissive lists defined in the pdm schema for specific classification of documents)

apply document_type_properties only to document_files (inverse the referencing direction - use a optional attribute - only for thosese cases, where document_files are used only (not the docuemnt_as_product_approach).

Also decided (see FRA-65): introduce specified_item_classificaion_relationship (see general_classification_hierachy) and delete classification_type attribute

use the same approach for specific_document_classification.

See also issue #87, and #140 (both are also solved)

Incorporated Solutions:

introduced: specific_document_classification_hierarchy,

specific_item_classification_hierarchy

done as proposed.

Issue Reference No.: 144

Originator:	Rogerio Barra	**Date:**	
Country No.:	USA-9	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1292
Related Part/UoF:	PR1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Mapping of shape_dependent_property to item_shape is incorrect

Issue Description:

Mapping of shape_dependent_property to item_shape is incorrect. Mapping should differentiate between the shape_dependent_property with which the representation is associated and the property associated with shape definition (product_definition_shape).

Proposed Solutions/Remarks:

The mapping should be replaced with: representation<- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition-> represented_definition represented_definition=property_definition property_definition.definition-> characterized_definition characterized_definition=shape_definition shape_definition=product_definition_shape

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Decision: Include additional property_definition in mapping as proposed.

Incorporated Solutions:

Done as proposed.

Issue Reference No.: 145

Originator:	Rogerio Barra	**Date:**	
Country No.:	USA-10	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1292
Related Part/UoF:	PR1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

The mapping of shape_dependent_property involves general_property_association and general_property. Why are they needed ?

Issue Description:

The mapping of shape_dependent_property involves general_property_association and general_property. Why are they needed?

Proposed Solutions/Remarks:

The mapping should be replaced with: representation<- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition-> represented_definition represented_definition=property_definition property_definition.definition-> characterized_definition characterized_definition=shape_definition shape_definition=product_definition_shape

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Discussion/Clarification:

General_property was included in the mapping for consistency reasons: to do the mapping in the same way for all different kind of properties. I.e. what ever is call property in the ARM should have general_property in its mapping.

The proposed solution for validation properties requires either the removal of the mapping rule or the introduction of an OR case to distinguish between the common product definition usage and the validation property area.

Removal of the mapping rule would be more consistent with the ARM, as shape_dependent_property has no pointers to property/general_property.

Decision:

Remove the mapping rule that requires general_property for shape_dependent_property as proposed.

Incorporated Solutions:

Done as proposed.

Issue Reference No.: 146

Originator:	Rogerio Barra	**Date:**	
Country No.:	USA-11	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	410
Related Part/UoF:	PR1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

geometric validation property

Issue Description:

Industry has identified the need for exchange of geometric validation properties (centroid, surface area and volume). These are properties of shape representations and are used to validate the data exchange of solid and surface models.

Proposed Solutions/Remarks:

The geometric validation property requirement should be captured and the corresponding mapping table should use the string 'geometric_validation_property'.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

three alternatives were discussed:

----

1. do not accept it at all

2. accept it, but use a more appropriate mapping (repr_rel instead of a additional property_definition with .name='geometric_validation_property'

3. accept it as proposed (inluding the mapping proposed by PDES Inc.)

Alternatively: do not change the ARM, but recognize, that there is a instantiation which satisfies the need of the issue and that is possible in AP214 but not explicitly forseen.

Alternatively: Add subtype of shape_dependent_property called general_shape_dependent_property with attributes property_type (permissive list value = surface_area, volume, centroid, ...) and property_value. Problem: property_definition.name should be in this case not restricted to be 'shape dependent property' -> change of mapping of supertype required.

Additional side issue:

in 4.2: moments of inertia : only six different value not nine different values as stated in the current text of AO moments_of_inertia

proposal Mo: make subtype general_shape_dependent_prop

was ist nicht explizit im Mapping: dass die validation prop. auf eine single solid geht; Damit ist der linke Teil des Agreements im ARM, rechter dann in den Recommendations

property_type permissive list: surface area, volume, centroid!

rename to geometric_validation_property to not force the information, that it is a validation property in value_determination which causes other mapping not inline with PDES/ProSTEP agreement.

relax, that for shape_dependent_property property_definition.name not restricted to shape_dependent_property.

general question, if it should be in the model, can be outside of the model. do we have only these validation, or need we more.

proipsoal: to go back to general_shape_dep_prop. in recommendation: do not use value_determination, use 'geometric val prop' for property_definition.name.

still problem: attribute value_determination mandatory to say if it is for the designer, for the validation, etc. mapping!!

solution: add general_shae_dep_prop. name 'geo val prop' does not appear in mapping. But is not disallowed! That's the compromise. Mapping has to ensure, that common practice

Incorporated Solutions:

1) done as proposed.

2) clarified in definition.

Issue Reference No.: 147

Originator:	Rogerio Barra	**Date:**	
Country No.:	USA-12	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	104
Related Part/UoF:	PR1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Renaming of "center of mass".

Issue Description:

The description of the application object refers to center of mass as a property that can be derived from the shape representation. In fact, this property should be named centroid.

Proposed Solutions/Remarks:

Change the description of the center of mass application object and create another application object named centroid.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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addressed to solution of issue #71

Incorporated Solutions:

Introduced general_shape_dependent_property with property_type 'centroid', 'surface area', and 'volume'

Issue Reference No.: 148

Originator:	Rogerio Barra	**Date:**	
Country No.:	USA-13	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	410
Related Part/UoF:	PR1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Requirement for "surface area" information

Issue Description:

Industry has identified surface area as a property that can be assigned to shape representations for validation purposes. This requirement is not captured in AP 214.

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Addressed by solution to issue #146

Incorporated Solutions:

see # 147

Issue Reference No.: 149

Originator:	Rogerio Barra	**Date:**	
Country No.:	USA-14	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	410
Related Part/UoF:	PR1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Requirement for "volume" information

Issue Description:

Industry has identified volume as a property that can be assigned to shape representations for validation purposes. This requirement is not captured in AP 214.

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Addressed by solution to issue #146

Incorporated Solutions:

see # 147

Issue Reference No.: 150

Originator:	Rogerio Barra	**Date:**	
Country No.:	USA-15	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2483
Related Part/UoF:	D1	**Clause:**	Annex_A
Sentence/abstract/keywords:			

constraint defined within dimension_callout_relationship

Issue Description:

There is a constraint defined within dimension_callout_relationship (wr2) that attempts to ensure that the relating attribute of the relationship references a type of dimension (e.g., linear_dimension, ordinate_dimension, leader_directed_dimension). However, a dimension can be presented as a combination of multiple types of dimensions. This rule should change the cardinality from '=1' to '>=1'. This issue has been submitted against AIC 506.

Proposed Solutions/Remarks:

The WHERE rule (dimension_callout_relationship.wr2) should be replaced with: wr2:

SIZEOF(TYPEOF(SELF.relating_draughting_callout) * [

'AUTOMOTIVE_DESIGN.ANGULAR_DIMENSION', 'AUTOMOTIVE_DESIGN.CURVE_DIMENSION',

'AUTOMOTIVE_DESIGN.DIAMETER_DIMENSION',

'AUTOMOTIVE_DESIGN.LEADER_DIRECTED_DIMENSION',

'AUTOMOTIVE_DESIGN.LINEAR_DIMENSION', 'AUTOMOTIVE_DESIGN.ORDINATE_DIMENSION',

'AUTOMOTIVE_DESIGN.RADIUS_DIMENSION']) >= 1;

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Rejected, since issue against AIC.

Incorporated Solutions:

solved by #151. no action required.

Issue Reference No.: 151

Originator:	Rogerio Barra	**Date:**	
Country No.:	USA-16	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2490
Related Part/UoF:	D1	**Clause:**	Annex_A

Sentence/abstract/keywords:

Error based on AIC504.

Issue Description:

It was found that the EXPRESS for the rule draughting_annotation_occurrence.wr7 defined in AIC 504 (Draughting Annotation)is incorrect.

Proposed Solutions/Remarks:

Generate long form based on corrected AIC 504

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Do as proposed.

Incorporated Solutions:

longform will be generated based on IS version of AIC's used.

Issue Reference No.: 152

Originator:	Rogerio Barra	**Date:**	
Country No.:	USA-17	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2657
Related Part/UoF:	D1	**Clause:**	Annex_A
Sentence/abstract/keywords:			

Error based on AIC506.

Issue Description:

It was found that the EXPRESS for the rules structured_dimension_callout.wr6 defined in AIC 506 (Draughting Elements)is incorrect. It states that if the contents of the structured_dimension_callout contain an annotation_text_occurrence that is 'prefix text', then the structured_dimension_callout shall participate as the dimension callout in a dimension_callout_component_relationship with name of 'prefix'. The EXPRESS of the above rule is coded in a way that it requires an annotation_text_occurrence with name 'prefix text' in a structured_dimension_callout.

Proposed Solutions/Remarks:

Generate long form based on corrected AIC 506

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Do as proposed.

Incorporated Solutions:

solved by #157. no action required.

Issue Reference No.: 153

Originator:	Rogerio Barra	**Date:**	
Country No.:	USA-18	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1765
Related Part/UoF:	D1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Conflict with AP202 approach

Issue Description:

The mapping of AP214 DIS takes an approach that assigns a representation of the dimension values to dimensions via property_definition and property_definition_representation. This conflicts with the AP202 approach and the mapping of the requirement to associate the presentation of the value in a callout with its respresentation.

Proposed Solutions/Remarks:

Use AP 202 mapping

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Do as proposed.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 154

Originator:	Rogerio Barra	**Date:**	
Country No.:	USA-19	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	P1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Definition of view_volume

Issue Description:

The Part 46 definition of view_volume indicates that it (and consequently its .projection_point and
.view_window attributes) is defined in a view reference system. This concept is consistent with computer
graphics practice and standards, like PHIGS. However, if one looks at the EXPRESS definition of view_volume,
that is not how STEP has defined it. As currently structured, view_volume is defined in the same coordinate
system of a camera_model. This is not correct. The coordinate system of the representation from which a
projection will be taken should be separate from the view reference coordinate system.

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Already solved.

Incorporated Solutions:

no action required. solved by #73.

Issue Reference No.: 155

Originator:	Rogerio Barra	**Date:**	
Country No.:	USA-20	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2642
Related Part/UoF:	D2	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

Shape_aspect_associativity is too constrained in AP214

Issue Description:

Shape_aspect_associativity is too constrained in AP214. It only allows for associations of leader curves, projection curves, or fill area boundaries to geometric model elements. It should allow for other types of annotation associations as well. What if someone wanted to associate an annotation_text_occurrence that is NOT directed to a shape element via a leader curve or a projection curve? There are systems that automatically compute the leader curves given the association between annotation and elements. The instantiation of the leader curves in these CAD kernels are not transparent to the API used for the STEP processors. Thus for these systems the exchange of associated text without leader curves is an important case.

Proposed Solutions/Remarks:

Remove WHERE rules 3 and 4

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Rejected, since issue is an issue against AIC 520.

Submit an issue against AIC520.

Incorporated Solutions:

since AIC 520 is IS, SEDS issue is required to remove wr3 and wr4 of shape_aspect_associativity. Will be submitted by ProSTEP.

Issue Reference No.: 156

Originator:	Rogerio Barra	**Date:**	
Country No.:	USA-21	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2418
Related Part/UoF:	D2	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

Annotation_occurrence_associativity is too constrained in AP214

Issue Description:

Annotation_occurrence_associativity is too constrained in AP214. It only allows for associations of leader curves, projection curves, or fill area occurrences to any other annotation element. It should allow for the associations of all types of annotation to each other.

Proposed Solutions/Remarks:

Remove WHERE rules

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Rejected, since issue is an issue against AIC 520.

Incorporated Solutions:

since AIC 520 is IS, SEDS issue is required to remove wr1 of annotation_occurrence_associativity. Will be submitted by ProSTEP.

Issue Reference No.: 157

Originator:	Rogerio Barra	**Date:**	
Country No.:	USA-22	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2418
Related Part/UoF:	P1	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

The draughting_model_annotation_layers global rule is too restrictive

Issue Description:

The draughting_model_annotation_layers global rule is too restrictive. This rule requires that every item of a draughting model has to be placed on a layer. Having in mind the usage of a draughting model in 3D to annotate 3D models this requirement is deemed to be too restrictive. There are CAD-systems that do not even have layers, but have 3D notes.

Proposed Solutions/Remarks:

Remove the rule

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Issue solved by #66.

Incorporated Solutions:

no action required. solved by #66.

Issue Reference No.: 158

Originator:	Rogerio Barra	Date:	
Country No.:	USA-23	Issue status:	accepted, Closed
Urgency:	minor	Type:	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	93
Related Part/UoF:	P2	Clause:	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Industry has identified the requirement to associate 3D notes to shape elements without leader lines.

Issue Description:

Industry has identified the requirement to associate 3D notes to shape elements without leader lines.

Proposed Solutions/Remarks:

Create an application object named associative text to capture this requirement.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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- issue solved by #74

- instantiation examples will be provided by Rogerio Barra: two instantiation examples for connection of associated_draughting_callout with associated_element_select pointing to "geometry" and "other annotation".

Incorporated Solutions:

no action required, solved by #74.

Issue Reference No.: 159

Originator:	Thomas. E. Hendrix, Boeing , thomas.e.hendrix@boeing.com	Date:	4 OCT 1999
Country No.:	USA-24	Issue status:	accepted, Closed
Urgency:	major	Type:	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	
Related Part/UoF:	T2	Clause:	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

position_tolerance must have a datum

Issue Description:

position_tolerance.reference_datum cardinality is S[1:3]. In some applications, a position tolerance is used to locate pattern components relative to each other without specifying any datums. This is not possible in AP 214. This is also an issue for AIC 519.

Proposed Solutions/Remarks:

change cardinality of position_tolerance.reference_datum to S[0:3]. Change mapping table and AIC 519 accordingly, using line_profile_tolerance as a template. This will require a change to schema definition of position_tolerance

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Do as proposed.

Incorporated Solutions:

done as proposted.

cardinality changed to S[0:3] in the ARM. Mapping can only be changed after resolution of FDIS ballot comment on AIC 519 that adresses this problem in the AIC. This has to be fixed after AP214 FDIS ballot.

Issue Reference No.: 160

Originator:	Thomas. E. Hendrix, Boeing , thomas.e.hendrix@boeing.com	**Date:**	4 OCT 1999
Country No.:	USA-25	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	T2	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

simultaneous gaging requirement

Issue Description:

there is not a way to declare that an aggregate of geometric_tolerances must be met simultaneously (ref ISO 5458 clause 3.4)

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Add AO simultaneous_tolerance S[2:?].

=> See picture.

Incorporated Solutions:

based on decisions regarding simultaneous_process_operation and simultaneous_activity changed to geometric_tolerance_rel.ship with relation_type 'simultaneous' and incorporated geometric_tolerance_precedence as well (relation_type 'precedence')

Issue Reference No.: 161

Originator:	Takamasa Tanaka , Nissan, ttanaka@mail.nissan.co.jp	Date:	September,1999
Country No.:	JAP-1	Issue status:	Closed
Urgency:	minor	Type:	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	
Related Part/UoF:	S3	Clause:	Clause_5.2

Sentence/abstract/keywords:

quantified_instance , selected_instance

Issue Description:

Looking at the mapping tables of both selected_instance and quantified_instance, Application Object ""selected_instance"" has a rule ""191"", however quantified_instance has no rule. From the harmonization reason, both entities shall have the same type of rule or selected_instace shall not have the rule as quantified_instance does not have.

Proposed Solutions/Remarks:

If quantified_instance is to have the same type of rule as selected_instance has. Then, the rule would be for example as follows Rule xxx: quantified_instance_usage_requires_representation ""The quantified_instance_usage_requires_representation rule specifies that each instance of product_definition_relationship which has a name of ""selected instance usage"" shall be represented by a representation which has a name of ""quantified criteria"" and which contains representaion.................... ""

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Incorporated Solutions:

The quantified_instance in the S3 case is mapped to a quantified_assembly_component_usage which already has a mandatory attribute quantity.
A rule is therefore not necessary.

Issue Reference No.: 162

Originator:	Takamasa Tanaka , Nissan, ttanaka@mail.nissan.co.jp	Date:	September, 1999
Country No.:	JAP-2	Issue status:	accepted, Closed
Urgency:	minor	Type:	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	
Related Part/UoF:	S7	Clause:	Cl. 4.2 (ARM) ,

Sentence/abstract/keywords:

Alternative_solution

Issue Description:

Looking at clause 4.2.10 ""alternative_solution""page ,it says "" Each Alternative_solution may be a Technical_solution, a Supplier_solution, or a Final_solution "". However Alternative_solution can be another

types of solution like ""Tecnical_supplie_solution"", ""Technical_final_solution"" and so on (i.e. AND/OR cases)

Proposed Solutions/Remarks:

The same type of textual description of WR2 in 5.2.3.78 restrict_alternative_definition shall be written on the page (4.2.10 Alternative_solution) in order to clarify the meaning of alternative_solution

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

accepted, add consistently in the boilerplate for the ANDOR case at the end ", or any combination of those object"

Incorporated Solutions:

done as proposed.

Issue Reference No.: 163

Originator:	Takamasa Tanaka , Nissan, ttanaka@mail.nissan.co.jp	Date:	September, 1999
Country No.:	JAP-3	Issue status:	accepted, Closed
Urgency:	minor	Type:	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	
Related Part/UoF:	S3	Clause:	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

replaced_usage_relationship , effectivity

Issue Description:

Explanation of Application Object ""Replaced_usage_relationship"" (4.2.417) would be better to be modified in order to clarify the meaning of the Application Object. Because current explanation says that effectivity is specifying only the start of validity. However effectivity is specifying not only start but also end of validity using date or event.

Proposed Solutions/Remarks:

Improved explanation would be, for instance, as follows: Each replaced_usage_relationship shall be referenced by an effectivity that defines the start and end of the validity of the replacement. At the same time, from the same reason, the explanation of rule 5.2.3.73 ""product_definition_substitute_requires_effectivity_assignment"" also would be better to be modified.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

remove "the start of " from the 2nd. sentence of the definition of the AO replaced_usage_relationship ("Each

Replaced_usage_relationship shall be referenced by an Effectivity that defines the start of the validity of the replacement.")

Incorporated Solutions:

done as proposed.

Issue Reference No.: 164

Originator:	Takamasa Tanaka , Nissan, ttanaka@mail.nissan.co.jp	**Date:**	September, 1999
Country No.:	JAP-4	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.177
Related Part/UoF:	S4	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

effectivity _ assignment

Issue Description:

Explanation of role attribute (4.2.177.3) in AO Effectivity_assignment (4.2.177) says that "" if one of the values ' actual start', 'actual stop', 'planned start' or 'planned stop' is specified, no secondary_definition shall be given in the assigned Effectivity "". This sentence shall include the values ' required start' and ' required stop' as well.

Proposed Solutions/Remarks:

Explanation of role attribute (4.2.177.3) in AO Effectivity_assignment (4.2.177) shall be as follows: "" if one of the values ' actual start', 'actual stop', 'planned start', 'planned stop', required start' or 'required stop' is specified, no secondary_definition shall be given in the assigned Effectivity ""

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
==
solved by #347

Incorporated Solutions:

solved by # 347.

Issue Reference No.: 165

ISO/DIS 10303-214 – Issue log

Originator:	Takamasa Tanaka , Nissan, ttanaka@mail.nissan.co.jp	**Date:**	September,1999
Country No.:	JAP-5	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.420
Related Part/UoF:	S4	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

Retention_period

Issue Description:

Explanation of latest_end_definition of AO retention_period (4.2.420) says ""The latest_end_definition specifies the point in time when all objects that the Retention_period is applied to shall be deleted"". This shall be improved.

Proposed Solutions/Remarks:

The explanation shall be improved as follows: ""The latest_end_definition specifies the point in time before which (or by which) all objects that the retention_period is applied to shall be deleted."" (see earliest_end_definition)

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

accepted, replace by "before which any objects that the retention_period is applied to " ... Shall be consistent with definition of earliest end_definition

replace deletet by deleted or destroyed in the definition of the whole AO

Incorporated Solutions:

done as proposed.

Issue Reference No.: 166

Originator:	Takamasa Tanaka , Nissan, ttanaka@mail.nissan.co.jp	**Date:**	September, 1999
Country No.:	JAP-6	**Issue status:**	Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	5.2.3.173
Related Part/UoF:	PR1	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

Property, Property_value

Issue Description:

WR1 of Global rule 5.2.3.173 restrict_property_value_representation shall be modified to include ""qualified_representation_item"". Because attribute ""value_determination"" of AO ""property_value"" is to be mapped to qualified_representation_ item (see Mapping table item_property.value_determination)

Proposed Solutions/Remarks:

WR1 of Global rule 5.2.3.173 restrict_property_value_representation shall be as follows: "" This representation_item shall be of type descriptive_representation_item, measure_ representation_item, list_representation_item, value_range, or qualified_representation _item. "" At the same time, the explanation of Global rule 5.2.3.173 restrict_property_value_representation also is to be modified as the same way to add qualified representation item.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Incorporated Solutions:

rule 'restrict_property_value_representation' was completly removed, so the issue "disappeared"

Issue Reference No.: 167

Originator:	Takamasa Tanaka , Nissan, ttanaka@mail.nissan.co.jp	**Date:**	September,1999
Country No.:	JAP-7	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	PR1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Shape_dependent_property

Issue Description:

Looking at the mapping table of ""shape_dependent_property"", reference path of "" shape_dependent_property to item_shape"" has mapping rule (2 rule) as follows. 1) property definition.name = 'shape dependent property' AND 2) regarding ""derived_property_select and general_property"" However, shape_dependent_property itself is neither a type of property nor a type of general property(both cases are to be mapped to general_property), therefore the second rule would not be needed. In the case of ""shape_dependent_property to shape_element"", it has the same problem.

Proposed Solutions/Remarks:

The second rule at the mapping rule in the reference path of ""shape_dependent_property to item_shape"" shall be deleted. The second rule at the mapping rule in the reference path of ""shape_dependent_property to shape_element"" also shall be deleted

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Addressed by solution of issue #144

Incorporated Solutions:

no action required. See #144.

Issue Reference No.: 168

Originator:	Takamasa Tanaka , Nissan, ttanaka@mail.nissan.co.jp	**Date:**	September,1999
Country No.:	JAP-8	**Issue status:**	Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

"planned_date , actual_date of AO ""approval"""

Issue Description:

Regarding the attributes ""planned_date"" and ""actual_date"" of AO ""approval"": WR1 of global rule 80 ""restrict_approval"" says that each approval shall be referenced by at most one approval_date_time. However looking at the definition of approval and it's attributes (planned date, actual date) in ARM, we can not see such restriction. It means that ,in some situation, both ""planned_date"" and ""actual_date"" can be used at the same time.

Proposed Solutions/Remarks:

WR1 of global rule 5.2.3.80 ""restrict_approval"" shall be modified (or deleted) to reflect the situation above.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
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Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 169

Originator:	Takamasa Tanaka , Nissan, ttanaka@mail.nissan.co.jp	**Date:**	September, 1999
Country No.:	JAP-9	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.210
Related Part/UoF:	S2	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

Full_model_change

Issue Description:

The explanation of ""added_element"" in full_model_change shall be adjusted to the explanation of ""deleted_element"" in model_change in order to clarify the meaning as well as harmonization reason..

Proposed Solutions/Remarks:

The explanation of ""added_element"" shall be as follows. The added_element specifies the elements in the model or in the view area representing the situation after the change, that have been added during the change. <---- to add "" , "" before "" that have been added during the change"" sentence. (see the definition of deleted_element)

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Do as proposed.

Incorporated Solutions:

done as proposted.

Issue Reference No.: 170

Originator:	Takamasa Tanaka , Nissan, ttanaka@mail.nissan.co.jp	**Date:**	September,1999
Country No.:	JAP-10	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.139
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

design_discipline_item_definition

Issue Description:

The explanation of ""design_discipline_item_definition"" says ""Each Design discipline item definition may be a Mating definition, a Collection definition, an Assembly definition, or a Process state "". However in order to clarify the meaning of ""design_discipline_item_definition"", a case "" or anything "" shall be added to one of the cases of ""design_discipline_item_definition"" .

Proposed Solutions/Remarks:

The following statement would be appropriate: ""Each Design discipline item definition may be a Mating definition, a Collection definition, an Assembly definition, a Process state, or anything"".

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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no issue, alread solved by the term "may be" (this covers the anything else)

Incorporated Solutions:

no action required.

Issue Reference No.: 171

Originator:	Takamasa Tanaka , Nissan, ttanaka@mail.nissan.co.jp	**Date:**	September,1999
Country No.:	JAP-11	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.21
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) ,

Sentence/abstract/keywords:

Application_context

Issue Description:

The explanation "" application_domain "" and "" life_cycle_stage "" in AO "" application_context"" shall be matched to the mapping rules in the corresponding mapping table description.

Proposed Solutions/Remarks:

The explanation of 4.2.21.1 application_domain shall be include "" Where applicable the following values shall be used: 'assembly study', 'digital mock-up', 'electrical design', 'mechanical design', 'preliminary design'. 'process planning' "" in order to clarify the meaning of application domain as well as to harmonize with the corresponding mapping table description. (see: 4.2.450.2 classification_name) Regarding "" life_cycle_stage "" in AO "" application_context"", it has the same situation. The statement ""Where applicable the following values shall be used: 'design', 'manufacturing', 'recycling' shall be included instead of the current Example statement.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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accepted, include values as permissive list. definitions will be provided by the AP214 Recom. Pract. Team!!!

Incorporated Solutions:

permissive list values added

descriptions added

Issue Reference No.: 172

Originator:	Takamasa Tanaka , Nissan, ttanaka@mail.nissan.co.jp	**Date:**	September, 1999
Country No.:	JAP-12	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 5.1 (Mapping tables) , Clause_5.2

Sentence/abstract/keywords:

document_format_property

Issue Description:

< This might be a kind of confirmation rather than an issue >. The explanation of
""document_format_property"" says ""At least one of the optional attributes shall be specified for each instance
of this object."" (Optional attribute: data_format, character_format, size_format). Somewhere in the AIM (e.g.
Global rule or Mapping rule) the same restriction above shall be described in order to harmonize with ARM
description. However currently we can not see such restriction in corresponding AIM portion.
Document_size_property also has the same issue. As confirmation: Where shall we do to represent such
restriction ?

Proposed Solutions/Remarks:

Somewhere in the AIM (e.g. Global rule or Mapping rule of ""document_format_ property"") the same
restriction above shall be described in order to harmonize with ARM description.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Decision:

change mapping of document_xxx_property, to representation with name 'document xxx'

constraint is implicetly through rep.items S[1:?]

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 173

Originator:	Takamasa Tanaka , Nissan, ttanaka@mail.nissan.co.jp	Date:	September,1999
Country No.:	JAP-13	Issue status:	Closed
Urgency:	minor	Type:	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	
Related Part/UoF:	E1	Clause:	Clause_5.2
Sentence/abstract/keywords:			

ARM: document_assignment, AIM: applied_document_reference

Issue Description:

Short form "" applied_document_reference "" has two rules. Looking at the formal propositions of WR1 and
WR2, both first sentences are slightly different each other. Those would be better to start with the same type of
sentence (words order).

Proposed Solutions/Remarks:

Those rules (WR1, WR2) shall be started with the same type of sentence either "" If the name of the role is
......."" or "" If the role has a name of ...... ""

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 174

Originator:	Takamasa Tanaka , Nissan, ttanaka@mail.nissan.co.jp	**Date:**	September, 1999
Country No.:	JAP-14	**Issue status:**	Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S3	**Clause:**	Clause_5.2 Annex_H

Sentence/abstract/keywords:

item_definition_relationship

Issue Description:

The mapping table of "" item_definition_relationship "" has a rule (169: restrict_product_definition_context_for_external_properties). In this rule 169 , there is a formal proposition (WR1) saying "" Each instance of product_definition which is referenced as the derived_definition by a general_property_association with a name of 'definitional' shall be referenced as the definition...... "". But if you look at Annex H figure 54, ""product_definition"" is not referenced by derived_definition of ""general_property_association"".

Proposed Solutions/Remarks:

Harmonize between the rule (169: restrict_product_definition_context_for_external_properties) and Annex H figure 54.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Incorporated Solutions:

1)The mentioned rule does not apply to the mapping of item_definition_relationship, and has been removed from the rules column of that mapping.

2) .... muss von Herrn Staub gecheckt werden, der Text ist tatsaechlich falsch und muss heissen:

The restrict product definition context for external properties rule specifies that a product definition which is referenced as the definition by a property_definition which is referenced as the derived definition by a general property association.

Issue Reference No.: 175

Originator:	Takamasa Tanaka , Nissan, ttanaka@mail.nissan.co.jp	**Date:**	September,1999
Country No.:	JAP-15	**Issue status:**	Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S4	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

manufacturing_configuration (G11)

Issue Description:

The explanation ""4.2.298 manufacturing_configuration"" does not say anything about the restriction described in WR1 and WR2 of ""5.2.3.197 subtype_mandatory_manufacturing_effectivity"" . This restriction is important for ARM (i.e. the user of AP) , therefore this type of information shall be included in the explanation of ""4.2.298 manufacturing_configuration""

Proposed Solutions/Remarks:

Add the restrictions described both in WR1 and WR2 in the rule 197 to the explanation of ""4.2.298 manufacturing_configuration""

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
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Incorporated Solutions:

wr1: of the rule is covered by ARM structure (only available for manufacturing_configuration)
wr2: covered by declaration of manufacturing_configuration as ABSTRACT.
no action required.

Issue Reference No.: 176

Originator:	Takamasa Tanaka , Nissan, ttanaka@mail.nissan.co.jp	**Date:**	September, 1999
Country No.:	JAP-16	**Issue status:**	Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Clause_5.2 Annex_H
Sentence/abstract/keywords:			

Configuration

Issue Description:

The explanation of the attribute "" configured_element"" of AO ""configuration"" says "" There shall be exactly one object that defines the configured_element for a Configuration "". However, looking at AIM (mapping table,

global rule, ...) , such restrictions can not be seen. Furthermore ,looking at Annex H Figure H73, it says configured effectivity assignment(corresponding to AO configuration) refers one or more configured_effectivity_items. Therefore Annex H Figure H73 and explanation of ""5.2.3.1.43 configured effectivity assignment "" shall be modified. The attribute "" is_solution_for "" of AO ""configuration"" has the same situation , it says "" There shall be exactly one object that the Configuration is_solution_for"". And looking at ""5.2.3.1.43 configured effectivity assignment "", there are WR4 that explains this restriction.

Proposed Solutions/Remarks:

Annex H figure H73 and EXPRESS description shall be modified in order to reflect restriction above.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Incorporated Solutions:

mapping paths have been modified and local rules have been included to restrict the no. of items in configured_effectivity_assignment and configured_effectivity_context_assignment to exactly one.

Issue Reference No.: 177

Originator:	Mitsuteru Yoshida,Toyota Motor Corporation, mitsuteru_yoshida@mail.toyota.co.jp	**Date:**	October, 1999
Country No.:	JAP-17	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2029
Related Part/UoF:	P2	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

Lack of AIM rules.

Issue Description:

There is a rule about draughting_callout in AP202, but there is no rule about it in AP214.

Proposed Solutions/Remarks:

Add a subtype_mandatory_draughting_callout rule which is same as AP202 5.2.3.51 .

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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- To be harmonized with AP202, the rule will be incorporated.

- Furthermore the mapping of Draughting_callout will be adapted (i.e. Draughting_callout will not map to draughting_callout any more, but to subtype draughting_elements).

Incorporated Solutions:

-changed mapping of detailed_element to (styled_item)(draughting_elements)

--adapted assertions to detailed_element in S2 accordingly

--added rule subtype_mandatory_draughting_callout

--changed mapping of dimension_callout in D1 to (draughting_elements)(structured_dimension_callout)

Issue Reference No.: 178

Originator:	Mitsuteru Yoshida, Toyota Motor Corporation, mitsuteru_yoshida@mail.toyota.co.jp	**Date:**	October, 1999
Country No.:	JAP-18	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2029
Related Part/UoF:	P2	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

Lack of AIM rules.

Issue Description:

There is a rule about pre_defined_symbol in AP202, but there is no rule about it in AP214.

Proposed Solutions/Remarks:

Add a subtype_mandatory_ pre_defined_symbol rule which is same as AP202 5.2.3.55 .

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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- Check back with Jürgen Mohrmann

Incorporated Solutions:

Rule added. It additionally includes surface_condition_symbol, which is not in 202, but in 214.

Issue Reference No.: 179

Originator:	Mitsuteru Yoshida, Toyota Motor Corporation, mitsuteru_yoshida@mail.toyota.co.jp	**Date:**	October, 1999
Country No.:	JAP-19	**Issue status:**	Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2029
Related Part/UoF:	S1	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

Lack of AIM rules.

Issue Description:

There is a rule about product_definition in AP202, but there is no rule about it in AP214.

Proposed Solutions/Remarks:

Add a product_definition_instantiation rule which is same as AP202 5.2.3.38 .

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Incorporated Solutions:

issue rejcted, since not applicable in AP214

Issue Reference No.: 180

Originator:	Mitsuteru Yoshida, Toyota Motor Corporation, mitsuteru_yoshida@mail.toyota.co.jp	**Date:**	October, 1999
Country No.:	JAP-20	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2029
Related Part/UoF:		**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

Lack of AIM rules.

Issue Description:

There is a rule about representation in AP202, but there is no rule about it in AP214.

Proposed Solutions/Remarks:

Add a representation_instantiation rule which is same as AP202 5.2.3.43 .

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Since AP214 has more subtypes of representation in scope (e.g.

mechanical_design_geometric_presentation_representation) than AP202, the rule can not be added.

Incorporated Solutions:

no action required.

Issue Reference No.: 181

Originator:	Mitsuteru Yoshida, Toyota Motor Corporation, mitsuteru_yoshida@mail.toyota.co.jp	**Date:**	October, 1999
Country No.:	JAP-21	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2029
Related Part/UoF:		**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

Lack of AIM rules.

Issue Description:

There is a rule about shape_aspect in AP202, but there is no rule about it in AP214.

Proposed Solutions/Remarks:

Add a shape_aspect_instantiation rule which is same as AP202 5.2.3.45 .

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Rejected, since AP214 has the requirement to identify shape elements adding only name and/or description, a rule requiring that shape_aspect instance is alwas referenced at least one time is not adequate.

Incorporated Solutions:

no action required.

Issue Reference No.: 182

Originator:	Mitsuteru Yoshida, Toyota Motor Corporation, mitsuteru_yoshida@mail.toyota.co.jp	**Date:**	October, 1999
Country No.:	JAP-22	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2029
Related Part/UoF:	P2	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

Lack of AIM rules.

Issue Description:

There is a rule about symbol_colour in AP202, but there is no rule about it in AP214.

Proposed Solutions/Remarks:

Add a symbol_colour_instantiation rule which is same as AP202 5.2.3.58 .

ISO/DIS 10303-214 – Issue log

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Do as proposed.

Incorporated Solutions:

no action required. rule is already available as dependent_instantiable_symbol_colour.

Issue Reference No.: 183

Originator:	Mitsuteru Yoshida, Toyota Motor Corporation, mitsuteru_yoshida@mail.toyota.co.jp	**Date:**	October, 1999
Country No.:	JAP-23	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2029
Related Part/UoF:		**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

Lack of AIM rules.

Issue Description:

There is a rule about shape_representation in AP202, but there is no rule about it in AP214.

Proposed Solutions/Remarks:

Add rule which is like subtype_mandatory_shape_representation_2d_or_3d in AP202 5.2.3.57 .

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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- check with Jürgen mohrmann, if rule requiring only geometric or topological items, is realizable.

Incorporated Solutions:

Further investigations shows that shape_representations are used in AP214 in various places in different contexts, e.g. form features, and also the geometry area in AP214 is more complex as in AP202. A rule that coveres the scope of subtype_mandatory_shape_representation_2d_or_3d of AP202 would be too complex to cover all cases sufficiently and the proposed solution is therefore depricated.

Issue Reference No.: 184

Originator:	Mitsuteru Yoshida, Toyota Motor Corporation, mitsuteru_yoshida@mail.toyota.co.jp	**Date:**	October, 1999
Country No.:	JAP-24	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	767
Related Part/UoF:	D1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

editorial mistake

Issue Description:

There are three mistakes. 1. In the reference path of 'dimension_callout to dimension_symbol (as callout_element)', 'draughting_callout_element' is mapping to annotation_text_occurrence instead of annotation symbol_occurrence. 2. In reference path of 'dimension_callout to geometric_dimension (as is_displaying)' , the path has case #1 and #2. #1 is not-structured case. #2 is structured case. But paths of two cases are oppposite. 3. In reference path of 'dimension_callout to geometric_dimension (as is_displaying)' , the path has case #3 and #4. #3 is size_dimension case. #4 is location_dimention case. But paths of two cases are oppposite.

Proposed Solutions/Remarks:

1. Replace 'draughting_callout_element = annotation_text_occurrence' to 'draughting_callout_ element = annotation_symbol_occurrence '. 2. Path of #1 should be '#1: (draughting_callout <=)'. And path of #2 should be '#2: (structured_dimension_callout <= draughting_callout) '. 3. Path of #3 should be '#3: (dimensional_characteristic = dimensional_size dimensional_size)'. And path of #4 should be '#4: (dimensional_characteristic = dimensional_locationdimensional_location)'.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Do as proposed.

Incorporated Solutions:

1. done as proposed.

2. done as proposed.

3. interchanged or case documentation texts in geometric_dimension (T1).

Issue Reference No.: 185

Originator:	Mitsuteru Yoshida, Toyota Motor Corporation, mitsuteru_yoshida@mail.toyota.co.jp	**Date:**	October, 1999
Country No.:	JAP-25	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1027, 2029
Related Part/UoF:	P1	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

lack of constraint

ISO/DIS 10303-214 – Issue log

Issue Description:

Attribute is_presented_in of model_image has application assersion 4.3.942 Model_image to View. That specifies ' Each Model_image is_presented_in exactly one View.'. But 'exactly one' information does not match mapping table etc. Current mapping table describe following,

#1: (camera_image_2d_with_scale <=)

#2: (camera_image_3d_with_scale <=) camera_image <= mapped_item <= representation_item <- representation.items[i] representation => presentation_representation => presentation_view That means model_image can be presented none or more view.

Proposed Solutions/Remarks:

Add a global rule follwing and add the rule number to model_image to view (as is_presented_in) in mapping table(p.1207). restrict_ camera_image The restrict_ camera_image rule specifies that each camera_image (camera_image_2d_with_scale or camera_image_3d_with_scale) shall be presented in exactly one view. *) RULE restrict_ camera_image FOR (camera_image); WHERE WR1: SIZEOF (QUERY (ci <* camera_image | .... END_RULE; (* Formal Propositions: WR1: each camera_image (camera_image_2d_with_scale or camera_image_3d_with_scale) should be presented in exactly one view.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Do as proposed.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 186

Originator:	Mitsuteru Yoshida, Toyota Motor Corporation, mitsuteru_yoshida@mail.toyota.co.jp	**Date:**	October, 1999
Country No.:	JAP-26	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1206
Related Part/UoF:	P1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

editorial mistake

Issue Description:

In reference path of 'view_volume_placement' , the path has case #1 and #2. #1 is 2d case. #2 is 3d case. But AIM elements of two cases are opposite.

Proposed Solutions/Remarks:

AIM elements of #1 should be '#1 (planar_box.placement)'. And AIM elements of #2 should be '#2 (camera_model_d3.view_reference_system)'.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Accepted. Do as proposed.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 187

Originator:	Mitsuteru Yoshida, Toyota Motor Corporation, mitsuteru_yoshida@mail.toyota.co.jp	**Date:**	October, 1999
Country No.:	JAP-27	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1209
Related Part/UoF:	P1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

mistake of attribute name

Issue Description:

In reference path of 'styled_geometric_model to geometric_model (as styled_geometry_model) ', in 4th line, attribute name 'context_of_items' of 'representation' is mistaken.

Proposed Solutions/Remarks:

Change attribute name 'context_of_item' to 'context_of_items'.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Do as proposed.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 188

Originator:	Mitsuteru Yoshida, Toyota Motor Corporation, mitsuteru_yoshida@mail.toyota.co.jp	**Date:**	October, 1999
Country No.:	JAP-28	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1211
Related Part/UoF:	P1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

editorial mistake

Issue Description:

There are 2 mistake. 1. In AIM element of 'styled_model_relationship to multi_language_string', there are #3 and #4 cases. But #3, #4 cases don't define in mapping table. 2. In reference path of 'styled_model_relationship to multi_language_string', there are #1 and #2 cases. They are not #1, #2 case, nor #3, #4 cases.

Proposed Solutions/Remarks:

1. In 'styled_model_relationship' applicatiln element, add #3 and #4 cases belloew #2 case. '#3: For the string_with_language that is of main interest. #4: For any other element in that set.'. 2. replace #1 to #3, #2 to #4.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
===
Do as proposed.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 189

Originator:	Mitsuteru Yoshida, Toyota Motor Corporation, mitsuteru_yoshida@mail.toyota.co.jp	**Date:**	October, 1999
Country No.:	JAP-29	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	764, 1227
Related Part/UoF:	D1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

lack of rules in mapping table

Issue Description:

'ANNOTATION_CURVE' has two mapping table in D1 and P2. In mapping table of D1, ANNOTATION_CURVE mapping has relative rule '15'. But in mapping of P2. ANNOTATION_CURVE doesn't have relative rules.

Proposed Solutions/Remarks:

Add the relative rule '15'.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Do as proposed.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 190

Originator:	Mitsuteru Yoshida, Toyota Motor Corporation, mitsuteru_yoshida@mail.toyota.co.jp	**Date:**	October, 1999
Country No.:	JAP-30	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	There are no mapping table for T1, T2 in PDF version.
Related Part/UoF:	T1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

editorial mistake

Issue Description:

In mapping of 'geometric_dimension' , application element has case #1 and #2. #1 is size dimension case. #2 is location dimension case. But AIM elements and reference paths of two cases are oppposite.

Proposed Solutions/Remarks:

In if clause in application element, case #1 will be location dimension case, case #2 will be size dimension case.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Issue solved by change of the mapping (see #68).

Incorporated Solutions:

no action required. See issue #68.

Issue Reference No.: 191

Originator:	Mitsuteru Yoshida, Toyota Motor Corporation, mitsuteru_yoshida@mail.toyota.co.jp	**Date:**	October, 1999
Country No.:	JAP-31	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	There are no mapping table for T1, T2 in PDF version.
Related Part/UoF:	T1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

editorial mistake

Issue Description:

In reference path of 'Location_dimension to Multi_language_string (as description) ' in'location_dimension' , the path has case #9 and #10. But reference paths of two cases are #1 and #2.

Proposed Solutions/Remarks:

In reference path of 'Location_dimension to Multi_language_string (as description), case #1 will be #9 case, case #2 will be #10 case.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Do as proposed.

Incorporated Solutions:

Done as proposed.

Issue Reference No.: 192

Originator:	Mitsuteru Yoshida, Toyota Motor Corporation, mitsuteru_yoshida@mail.toyota.co.jp	**Date:**	October, 1999
Country No.:	JAP-32	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	164,444,749,750,754
Related Part/UoF:	C1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

editorial mistake

Issue Description:

In reference path of 'measuring_method ' in'Default_surface_texture' , the values of 'descriptive_representation_item.description' are 'ISO 4287', 'ISO 12185', 'ISO 13665'. But the description of application object specifies 'ISO 4287', 'ISO 12085', ISO 13565'. Same as 'surface_texture'.

Proposed Solutions/Remarks:

In reference path of 'measuring_method ' in 'Default_surface_texture', the values of 'descriptive_representation_item.description' will be 'ISO 4287', 'ISO 12085', ISO 13565'. Same as 'surface_texture'.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Change "ISO 12185" to "ISO 12085" and "ISO 13565" to "ISO13565" in description of default_surface_texture and surface_texture.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 193

Originator:	Hiroyuki Inagaki, Mitsubishi Motors Corporation, inagaki-hiroyuki@pde.mitsubishi-motors.co.jp	Date:	October, 1999
Country No.:	JAP-33	Issue status:	rejected, Closed
Urgency:	minor	Type:	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	2849
Related Part/UoF:	T1	Clause:	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

default_setting

Issue Description:

Currently it syaa ""default_value"" needs one or more ""default_setting_select"" However there is a case of no default_value in the drawing.

Proposed Solutions/Remarks:

Change ""default_value S[1:?]"" to ""default_value S[0:?]""

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Rejected, sincen issue based on misunderstanding; already clarified with submitter.

Incorporated Solutions:

no action required.

Issue Reference No.: 194

Originator:	Hiroyuki Inagaki, Mitsubishi Motors Corporation, inagaki-hiroyuki@pde.mitsubishi-motors.co.jp	**Date:**	October, 1999
Country No.:	JAP-34	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2849
Related Part/UoF:	T1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

default_setting

Issue Description:

default_thickness uses sometime parameter name ""t"".

Proposed Solutions/Remarks:

Change path of ""default_thickness"" to ""(ABS) value_with_unit"" to path of ""default_thikness"" to ""feature parameter""

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Add optional attribute named "parameter_name" to default_thickness.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 195

Originator:	Hiroyuki Inagaki, Mitsubishi Motors Corporation, inagaki-hiroyuki@pde.mitsubishi-motors.co.jp	**Date:**	October, 1999
Country No.:	JAP-35	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2849
Related Part/UoF:	T1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

default_setting

Issue Description:

There is defalut rib in the drawing.

Proposed Solutions/Remarks:

Add a reference from ""default_setting_select"" to ""rib_feature"" that means referenced ""rib_feature"" shows ""default rib feature""

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Rejected, since already covered by annotation capabilities.

Incorporated Solutions:

no action required.

Issue Reference No.: 196

Originator:	Masufumi Toho, Mazda Motor Corporation, touhou.m@is.mazda.co.jp	**Date:**	October, 1999
Country No.:	JAP-36	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	Application Object:287-288, AIM EXPRESS-G:3104, Mapping Table:1187-1188
Related Part/UoF:	K1	**Clause:**	Cl. 5.1 (Mapping tables) ,

Sentence/abstract/keywords:

kinematic_pair,pair_type

Issue Description:

In AIM, ""fully_constraint_pair"" and ""unconstraint_pair"" are under ""kinematic_pair"" . But no such descriptions are in Application Objects.

Proposed Solutions/Remarks:

Delete ""fully_constraint_pair"" and ""unconstraint_pair"" from AIM and Mapping table. (Mapping table: Reference path of KINEMATIC_PAIR AIM element of pair-type)

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

- Reference of IR part 106 in the mapping table will be substituted by reference of part 105.

- Description will be added in clause 4.2.

Incorporated Solutions:

Added values for fully constrained pair and unconstrained pair in definition of kinematic_pair.pair_type and corrected source number in mapping table.

Issue Reference No.: 197

ISO/DIS 10303-214 – Issue log

Originator:	kazuharu taga,HONDA EG,kazuharu_taga@hondaeg.co.jp	**Date:**	October, 1999
Country No.:	JAP-37	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	60
Related Part/UoF:	S8	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

ProsessPlan

Issue Description:

wrong word

Proposed Solutions/Remarks:

change from "as well as the relationship between the parts and the tools used to manufacture them" to "as well as the relationship between the items and the tools used to manufacture them" Because 'item' means a part and a tool. These are appeared at other application objects.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Issue deals with definiton of the UoF.

Do as proposed, i.e. the words have to be changed from "parts" to "items".

Change wording in definition of process_plan_operation_assignment.operation: "... is using..." instead of "...is assigning"

Incorporated Solutions:

1) Do as proposed, i.e. the words have to be changed from "parts" to "items"

2) done as proposed and inserted 'occurrences of' in first

sentence of second paragraph.

Issue Reference No.: 198

Originator:	kazuharu taga,HONDA EG,kazuharu_taga@hondaeg.co.jp	**Date:**	October, 1999
Country No.:	JAP-38	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	301
Related Part/UoF:	S8	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

ProcessPlan,Make_from_relationship

Issue Description:

no explanation

Proposed Solutions/Remarks:

add explanation of the difference among semi_finished part,in-process item and semi-finished item

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

- remove in-process item

- use semi-finished part and semi-finished item consistently, i.e. use semi-finished item

Incorporated Solutions:

done as proposed.

Issue Reference No.: 199

Originator:	takashi ogino,HONDA R&D,takashi.ogino@mail.a.rd.honda.co.jp	**Date:**	October, 1999
Country No.:	JAP-39	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	388
Related Part/UoF:	FF2	**Clause:**	Cl. 4.2 (ARM) ,

Sentence/abstract/keywords:

FormFeature,Rectangular_closed_pocket

Issue Description:

Figure58 title ""Rectangular pocket in a part"" is wrong.

Proposed Solutions/Remarks:

change to ""Rectangular_closed_pocket""

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

- all figure titles shall be harmonized, i.e. in the same style

- go through all figure titles and consistently do not use element names, but names expressing what feature instances may look like

Incorporated Solutions:

done as proposted.
All figure titles in UoF FF2 checked and enhanced, where appropriate.

Issue Reference No.: 200

ISO/DIS 10303-214 – Issue log

Originator:	kazuharu taga,HONDA EG,kazuharu_taga@hondaeg.co.jp	**Date:**	October, 1999
Country No.:	JAP-40	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	356
Related Part/UoF:	S8	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

ProcessPlan,Process_operation_relationship

Issue Description:

wrong explanation

Proposed Solutions/Remarks:

change from "decomposition....but these Design_disipline_item_definition shall have the same Item_version." to "decomposition....and these Design_disipline_item_definition may or may not have the same Item_version." In machining,all item in child process have same item_version.But in assembly,all part does not have same item_version.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Remove the sentence "in the case where parent ans child process exist, ... have the same item_version" from process_operation_occurence_relationship (formerly Process_operation_relationship).relation_type "decomposition".

Incorporated Solutions:

done as proposed.

Issue Reference No.: 201

Originator:	kazuharu taga,HONDA EG,kazuharu_taga@hondaeg.co.jp	**Date:**	October, 1999
Country No.:	JAP-41	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	464
Related Part/UoF:	S8	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

ProcessPlan,Tool_part_relationship

Issue Description:

wrong word

Proposed Solutions/Remarks:

change from "It establishes a relationship between a part(related) and a tool(relating) thet is used to produce the part" to "It establishes a relationship between a item(related) and a tool(relating) thet is used to produce the item"

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Replace the word "tool" by the word "item".

Incorporated Solutions:

done as proposed.

Issue Reference No.: 202

Originator:	takashi ogino,HONDA R&D,takashi.ogino@mail.a.rd.honda.co.jp	**Date:**	October, 1999
Country No.:	JAP-42	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1902
Related Part/UoF:	FF2	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

FormFeature,Boss_feature

Issue Description:

unmatch with mapping table

Proposed Solutions/Remarks:

change "feature_component_relationship" to "shape_defining_relationship"

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Do as proposed, i.e. fix WR3 of Boss_feature.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 203

Originator:	takashi ogino,HONDA R&D,takashi.ogino@mail.a.rd.honda.co.jp	**Date:**	October, 1999
Country No.:	JAP-43	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1903
Related Part/UoF:	FF2	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

FormFeature,Boss_feature,sweep_path

Issue Description:

with a description of 'linear'

Proposed Solutions/Remarks:

add " {shape_aspect.description='linear'} " to mapping table.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Do as proposed.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 204

Originator:	takashi ogino,HONDA R&D,takashi.ogino@mail.a.rd.honda.co.jp	**Date:**	October, 1999
Country No.:	JAP-44	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1905
Related Part/UoF:	FF2	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

FormFeature,boss_top

Issue Description:

feature_component_relationship

Proposed Solutions/Remarks:

change "feature_component_relationship" to "shape_defining_relationship"

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Issue discussed with Originator. Rejected; mapping table an short form are correct.

Incorporated Solutions:

no action required.

Issue Reference No.: 205

Originator:	takashi ogino,HONDA R&D,takashi.ogino@mail.a.rd.honda.co.jp	**Date:**	October, 1999
Country No.:	JAP-45	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	2016
Related Part/UoF:	FF2	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

FormFeature,pocket_bottom

Issue Description:

unmatch with mapping table

Proposed Solutions/Remarks:

change "feature_component_relationship" to "shape_defining_relationship"

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

- Clarification will be made in documentation.

- Add mapping rule on Feature_component_relationship.

Incorporated Solutions:

done as proposed, as well for hole_bottom_condition.

Issue Reference No.: 206

Originator:	Mattias Johansson, KTH, mjo@cadcam.kth.se	**Date:**	06.09.1999
Country No.:	SWE-1	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1714
Related Part/UoF:	S8	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

ARM requirement not met in AIM.

Issue Description:

In the ARM the mated_item_association.related can only point to an item_instance. In the corresponding mapping for mated_item_association, case #1, product_definition_relationship.related points to a mating_definition. It is not clear why this incorrespondance exists.

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

- Explanation in AP214 is insufficient.

- Distinction is between S3 and S7 case, which should be documented in the respective clauses.
See picture.

Incorporated Solutions:

Text for orcases of AO item_definition_instance_relationship changed (name of AO inserted).

orcases of mated_item_association = reference to orcases of item_definition_instance_relationship

Issue Reference No.: 207

Originator:	Mattias Johansson, KTH, mjo@cadcam.kth.se	**Date:**	06.09.1999
Country No.:	SWE-2	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1715
Related Part/UoF:	S8	**Clause:**	Cl. 5.1 (Mapping tables) ,

Sentence/abstract/keywords:

Attribute value problem

Issue Description:

The product_definition pointed by product_definition_relationship.realted, case #2, has an
application_context_element.name 'definitional_occurence'. In other mappings of mated_item_association the
product_definition_relationship.realted points to a product_definition with the
application_context_element.name 'part_occurence'.

Proposed Solutions/Remarks:

Change "application_context_element.name='deinitional occurence' " to
"application_context_element.name='part occurence' ".

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
==
- Consistency mistake in AP214.
- Do as proposed.

Incorporated Solutions:

done as proposed

Issue Reference No.: 208

Originator:	Mattias Johansson, KTH, mjo@cadcam.kth.se	**Date:**	06.09.1999
Country No.:	SWE-3	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1717
Related Part/UoF:	S8	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Attribut value problem.

Issue Description:

product_definition_relationship.name should have the value of 'mating membership'.

Proposed Solutions/Remarks:

Change "product_definition_relationship.name='same time machining' " to

"product_definition_relationship.name='mating membership' ".

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Do as proposed.

Incorporated Solutions:

done as proposed

Issue Reference No.: 209

Originator:	Mattias Johansson, KTH, mjo@cadcam.kth.se	**Date:**	06.09.1999
Country No.:	SWE-4	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1726
Related Part/UoF:	S8	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Attribute value problem.

Issue Description:

Wrong attribute value in the mapping of process_operation to multi_language_string (as name).

attribute_classification_assignment.attribute_name should have the value of 'name' not 'description'.

Proposed Solutions/Remarks:

Change "attribute_classification_assignment.attribute_name='description' " to

"attribute_classification_assignment.attribute_name='name' " for both mapping cases #1 and #2.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Rejected, since a general principle for the mapping of multi_langiage_string is to specify the name of the AIM elemenet and not the name of the ARM element.

Incorporated Solutions:

No action required

Issue Reference No.: 210

Originator:	Mattias Johansson, KTH, mjo@cadcam.kth.se	**Date:**	06.09.1999
Country No.:	SWE-5	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1737
Related Part/UoF:	S8	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Redundant mapping cases.

Issue Description:

There are identical mapping cases used.

Proposed Solutions/Remarks:

Remove the redundant mapping case.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

- Mapping cases #5, #6 and #9 are affected.

- Correct the description in the mapping tabele to fix the "identical mapping" problem (i.e. tool problem)

Incorporated Solutions:

text of or - cases #5, #6, and #9 replaced by references to or-cases of

AO Transformation. Text of #1 of Transformation changed.

Issue Reference No.: 211

Originator:	Mattias Johansson, KTH, mjo@cadcam.kth.se	**Date:**	06.09.1999
Country No.:	SWE-6	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1740
Related Part/UoF:	S8	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Attribute value problem.

Issue Description:

Wrong attribute value in the mapping of process_operation_resource_assignment to multi_language_string (as reason). attribute_classification_assignment.attribute_name should have the value of 'reason' not 'description'.

Proposed Solutions/Remarks:

Change ""attribute_classification_assignment.attribute_name='description' "" to

""attribute_classification_assignment.attribute_name='reason' "" for both mapping cases #1 and #2.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Rejected (see solution for #209).

Incorporated Solutions:

no action required.

Issue Reference No.: 212

Originator:	Mattias Johansson, KTH, mjo@cadcam.kth.se	**Date:**	06.09.1999
Country No.:	SWE-7	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1304 1353 1386
Related Part/UoF:	S1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Redundant mapping cases.

Issue Description:

There are identical mapping cases used.

Proposed Solutions/Remarks:

Remove the redundant mapping case.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Discussion:

There is agreement to improve OR case documentation to make it more precise. However, the possibilities are restricted due to limitations of the tools used to generate the mapping tables. The following restrictions apply:

- OR cases can only be document below the entity definition,not below the attribute defintions.

- No guarantee to make the OR cases mutually exclusive. Restructuring to show which OR cases belong together is not possible due to tool limitation, only the enhancement of text.

Duplicate entries currently in the mapping table came from incomplete description. In fact the OR cases are different, but the discrimination criteria is not described. Agreement to improve and complete the description.

Missing OR cases / incomplete coverage indicate a NO MAPPING. QC denied to have NO MAPPING or empty parantheses. The footnote "For the purpose of this mapping, only the subset of the mapping of the target object is applicable. " is a text coming from QC to denote the fact of NO MAPPING.

Proposal to use Conformance Class as OR case discriminator instead of UoF, where appropriate. As the UoF CC association is changing over time all corresponding OR case documentation have to be changed, too.

Decision:

1. Remove duplicate entries. Check wether are the same. Eliminate real duplicates. Create a different OR case for those who are not a duplicate and refine definition.

2. Do complete coverage, list the "NO MAPPING". Check with QC how the text of the note can be improved to be understandable. Use OR case documentation guidelines.

3. Do not use CCs as OR case discriminator.

 Incorporated Solutions:

OR case documentation in general was improved to make it more precise. It was tried to make the OR cases mutually exclusive where possible. Some OR cases have been restructured and text description has been enhanced to better describe discrimination criteria between the OR cases.

Complete coverage of all possible cases by OR cases has been introduced.

Missing OR cases / incomplete coverage are indicated by a footnote "For the purpose of this mapping, only the subset of the mapping of the target object is applicable. " This is a text coming from QC to denote the fact of NO MAPPING.

CCs as not used as OR case discriminator.

 Issue Reference No.: 213

Originator:	Mattias Johansson, KTH, mjo@cadcam.kth.se	**Date:**	06.09.1999
Country No.:	SWE-8	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1727 1296 1304 1322 1326 1353 1386 1411 1488 1489 1492 1495 1498 1500 1542 1504 1542 1569 1544
Related Part/UoF:	S3	**Clause:**	Cl. 4.1 (UoFs) ,

Sentence/abstract/keywords:

Conformance Class Interoperability Problem

 Issue Description:

Depending on the availability of a UOF, and therefore depending on the implemented conformance class, one and the same application object is mapped in totally different ways. This creates potentially a problem for exchanging and sharing data between different conformance classes of AP214.

Proposed Solutions/Remarks:

Occasionally if not often, the relevant AIM objects are parts of the same subtype/supertype graph. In some cases, it would therefore be useful to require External Mapping for all exchange file implementations of AP214, even though this is not a total solution to the problem. In addition, this is in conflict with decisions taken by the majority of implementors regarding External Mapping. Therefore, it would impact AP Interoperability in some cases.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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will be solved by Part41 extension

Incorporated Solutions:

Mappings of objects used in different UoFs have been harmonized. Especially the different mappings of item_instance in S3 and S7 were addressed by solution to issue #362.

Issue Reference No.: 214

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	16.08.1999
Country No.:	SWE-9	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1542 1522 1550
Related Part/UoF:	S4	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Redundant mapping cases

Issue Description:

There are pairwaise identical mapping cases.

Proposed Solutions/Remarks:

Remove redundant mapping cases.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Addressed by solution to issue #212

Incorporated Solutions:

Duplicate entries have been removed where necessary. OR case documentation has been improved (see solution to issue #212).

Issue Reference No.: 215

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	16.08.1999
Country No.:	SWE-10	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1542 1505 1510 1522 1544
Related Part/UoF:	S4	**Clause:**	Cl. 5.1 (Mapping tables) ,

Sentence/abstract/keywords:

Redundant constraint in reference path

Issue Description:

The constraint(s) for one or more mapping cases are just repetitions of a requirement defined structurally in the IR or AIM short form EXPRESS code.

Proposed Solutions/Remarks:

Remove the redundant constraint(s).

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Discussion: Agreement, that the mapping rules should not repeat requirements defined structurally in IR or AIM short form.

Decision: Remove unnecessary mapping rule in OR case #1 as proposed.

Incorporated Solutions:

Unnecessary mapping rules have been removed. However, in cases of AND mappings, where the mapping rule expresses a constraint e.g. in a way that both instances are in fact the same, being connected through a common supertype, the mapping rule was kept for clarification.

Issue Reference No.: 216

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	16.08.1999
Country No.:	SWE-11	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1542/3
Related Part/UoF:	S4	**Clause:**	Cl. 5.1 (Mapping tables) ,

Sentence/abstract/keywords:

Incomplete reference path

Issue Description:

In the reference path for case #2 (both occurances) is a line missing. This issue becomes irrelevant, if issue SWE-214-12 is accepted.

Proposed Solutions/Remarks:

#2: (effectivity <- EFFECTIVITY_ASSIGNMENT.ASSIGNED_EFFECTIVITY effectivity_assignment =>

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision: Complete reference path as proposed (already done in new AP214 document)

Incorporated Solutions:

Reference path column has been modified (mapping rule has been removed), so the issue becomes irrelevant (solved).

Issue Reference No.: 217

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	16.08.1999
Country No.:	SWE-12	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1542/3
Related Part/UoF:	S4	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Unnecessarily complex reference path

Issue Description:

The reference path provides mapping for logically impossible combinations of cases, such as #1+#3 or #2+#4. If this issue is accepted, issue SWE-214-11 becomes irrelevant.

Proposed Solutions/Remarks:

#1: (configuration_effectivity <= product_definition_effectivity product_definition_effectivity.usage -> assembly_component_usage) #2: (effectivity <- effectivity_assignment.assigned_effectivity effectivity_assignment => manufacturing_effectivity_assignment manufacturing_effectivity_assignment.items[i] -> manufacturing_effectivity_item manufacturing_effectivity_item = product_definition product_definition {product_definition.frame_of reference -> product_definition_context <= application_context_element application_context_element.name = 'part occurrence'})

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Addressed by solution to issue #216

Incorporated Solutions:

Mapping in this area has been changed. Unnecessary OR cases have been removed.

Issue Reference No.: 218

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	16.08.1999
Country No.:	SWE-13	**Issue status:**	Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1978
Related Part/UoF:	S4	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

Missing attribute declaration

Issue Description:

The attribute ITEMS is explained in the AIM and referenced in the mapping table of manufacturing_configuration. It is however missing from the EXPRESS code as well as EXPRESS-G.

Proposed Solutions/Remarks:

Add attribute to the EXPRESS code and the EXPRESS-G diagram.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
===
Do as proposed.

Incorporated Solutions:

Done as proposed

Issue Reference No.: 219

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	16.08.1999
Country No.:	SWE-14	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1543
Related Part/UoF:	S4	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Missing mappings

Issue Description:

The application object manufacturing_configuration is related to product_design, product_identification, and item_version via is_solution-for and configuration_context_select. The mapping table shows however only the connection to product_design. The relationships to product_identification and item version are missing.

Proposed Solutions/Remarks:

Add the missing rows.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Addressed by solution to issue #275 (ARM modification for manufacturing_configuration)

Incorporated Solutions:

Mapping path was changed, OR case #2 has been removed. Path correctly ends at mapping target of product_design.

Issue Reference No.: 220

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	17.08.1999
Country No.:	SWE-15	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1542 1504
Related Part/UoF:	S4	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Wrong AIM element

Issue Description:

According to the Mapping Table Guidelines, the AIM element should be PATH rather than a single AIM entity.

Proposed Solutions/Remarks:

Correct.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Rejected. Mapping is correct for both AO. Issue originator agreed.

Incorporated Solutions:

Corrected where necessary. The attribute mappings should be to AIM elements, the assertions should map to PATH.

Issue Reference No.: 221

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	17.08.1999
Country No.:	SWE-16	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1505
Related Part/UoF:	S4	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Mapping to a derived AIM attribute

Issue Description:

The mapping of an ARM attribute to a derived AIM attribute is theoretically complete, because the real mapping target can be found by analysis of the value derivation expression (function). This represents however a new and unnecessary burden for implementors. In addition, the mapping tables are inconsistent in this regard.

Proposed Solutions/Remarks:

Add the complete reference path correctly.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Discussion:

APs do it differently. AP212 consistently masp to the complete path.

AP212 in most cases maps to the derived attribute.

Decision:

1. Check with the mapping table guidelines and be compliant

2. Use one consistent approach

Incorporated Solutions:

It has been decided use one consistent approach for mapping to derived attributes, which is to map to the derived attribute directly. Mapping changed where necessary.

Issue Reference No.: 222

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	17.08.1999
Country No.:	SWE-17	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1525 - 1541
Related Part/UoF:	S4	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Incomplete reference path

Issue Description:

In all mappings of this relationship is the same line missing.

Proposed Solutions/Remarks:

event_occurrence <- EVENT_OCCURRENCE_ASSIGNMENT.ASSIGNED_EVENT_OCCURRENCE

event_occurrence_assignment <-

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision: Correct mapping table as proposed.

Incorporated Solutions:

Mapping has been corrected as proposed.

Issue Reference No.: 223

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	17.08.1999
Country No.:	SWE-18	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1530
Related Part/UoF:	S4	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Wrong mapping target

Issue Description:

The reference path for event_context, if it is pointing to a document_version, ends at product_definition. This is inconsistent with the mapping of event_context, if it is pointing to a document, which is product. It is also inconsistent with the mapping of effectivity_assignment.effective_element, which points to product_definition_formation.

Proposed Solutions/Remarks:

Fix the reference path such, that it ends in product_definition_formation.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Decision: Change mapping target to product_definition_formation for document_version as proposed

Incorporated Solutions:

Mapping target changed to product_definition_formation.

Issue Reference No.: 224

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	18.08.1999
Country No.:	SWE-19	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1544
Related Part/UoF:	S4	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Unnecessary mapping case

Issue Description:

Mapping case #3 is trying to fulfil a requirement in UOF S4, which is only stated as part of UOF S7. In addition, both solutions are different and inconsistent.

Proposed Solutions/Remarks:

Remove mapping case #3.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Partially addressed by solution to issue #212.

Decision: Remove or case #3 (to be covered by assertion class_structure_relationship to product_class)

Incorporated Solutions:

Product_class has been included in UoFs S4 and S7. The corresponding mapping is done in the context of each UoF. Or case #3 has been removed.

Issue Reference No.: 225

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	18.08.1999
Country No.:	SWE-20	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1544
Related Part/UoF:	S4	**Clause:**	Cl. 4.1 (UoFs) ,
Sentence/abstract/keywords:			

Unmapped requirement

Issue Description:

The target for the mapping of product_class.level_type is only available, if UOF S7 is present. In an UOF S4 only environment, there is NO MAPPING for this requirement.

Proposed Solutions/Remarks:

Alternative 1: Document the mapping as UOF dependent as it is. This will however violate the Mapping Table Guidelines. Nevertheless, this could be sufficient, as the main usage of level_type can be expected together with product_class_relationship in UOF S7. However, level_type is mandatory in the ARM, which we should fix at least. Alternative 2: Remove mapping case #2. This would also solve the PRODUCT_CLASS related part of issue SWE-214-8.

Discussed Solutions:

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was discusssed in the Mapping Group

Incorporated Solutions:

Mapping has been changed to reflect the NO MAPING case for UoF S4 (note has been added).

Issue Reference No.: 226

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	Date:	18.08.1999
Country No.:	SWE-21	Issue status:	accepted, Closed
Urgency:	minor	Type:	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	1545
Related Part/UoF:	S4	Clause:	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Incomplete reference path

Issue Description:

In this reference path a SELECT type is missing.

Proposed Solutions/Remarks:

configuration_design configuration_design.design -> CONFIGURATION_DESIGN_ITEM

CONFIGURATION_DESIGN_ITEM = PRODUCT_DEFINITION_FORMATION product_definition_formation

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Decision:

Accepted. Check and complete reference path if necessary

Incorporated Solutions:

Mapping path has been corrected (configuration_design_item SELECT included).

Issue Reference No.: 227

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	Date:	18.08.1999
Country No.:	SWE-22	Issue status:	accepted, Closed
Urgency:	minor	Type:	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	1550 - 1565
Related Part/UoF:	S4	Clause:	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Incomplete reference path

Issue Description:

Most reference paths for relationships from the the application object retention_period don't start at the AIM object retention but at its supertype action.

Proposed Solutions/Remarks:

Insert at the start of the reference path: RETENTION <=

ISO/DIS 10303-214 – Issue log

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Decision:

Accepted. Check and complete reference path if necessary

Incorporated Solutions:

Start of maping path corrected where necessary.

Issue Reference No.: 228

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	18.08.1999
Country No.:	SWE-23	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1567 - 1568
Related Part/UoF:	S4	**Clause:**	Cl. 5.1 (Mapping tables) ,

Sentence/abstract/keywords:

Unnecessary mapping case

Issue Description:

The distinction of the mapping cases #7 and #8 for both mappings of retention_period.start_definition is not necessary. It also makes this mapping inconsistent with the mappings of earliest- and latest_end_definition. In addition, it introduces still another element of conformance class interoperability problems.

Proposed Solutions/Remarks:

Remove mapping case #8 in both mappings.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Decision:

Accepted. Check and remove OR case mapping #7, #8 if necessary

Incorporated Solutions:

OR cases for start_definition have been reworked, documentation was improved.

Issue Reference No.: 229

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	Date:	20.08.1999
Country No.:	SWE-24	Issue status:	accepted, Closed
Urgency:	major	Type:	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	1522 - 1542
Related Part/UoF:	S4	Clause:	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

No value for mandatory AIM attribute

Issue Description:

Mapping case #2 is problematic, because relative_event_occurrence has a mandatory pointer base_event to an event_occurrence. Therefore, implementers have the following options: Option 1: One instance of relative_event_occurrence, which references itself. Option 2: One instance of relative_event_occurrence, which references a different instance of event_occurrence. Option 1 is structually very close to the ARM requirement. It violates however the textual definition of the entity relative_event_occurrence and its attribute base_event. It may therefore become an AP interoperability problem. Option 2 is consistent with the IRs. It introduces on the other side some redundancy, as each of the 2 instances has the attributes id, name, and description; the first 2 being mandatory. In principle, we consider this type of issue as critical for the following reasons: - It causes unnecessary effort during production use of the standard. - It is error prone, as the receiver may not be aware of the faked nature of this data. - It violates the principles of the ISO 9000 series of standards, because it is practically impossible to define the responsibility for this data in any reasonable way.

Proposed Solutions/Remarks:

Choose an option and provide the necessary additional documentation to make it implementable. If option 2 is chosen, event_type and description should go into the attributes of the base_event.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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The group agreed that there should be some normative text in the document stating the 3 cases:

- system has the data, but won't exchange (ARM)

- system has no value for a mandatory attribute (ARM)

- attributes not populated by ARM requirements (AIM)

There are several possibilities where to include such text: e.g. a general statement in the beginning of the shortform clause. Or in Annex C.

A recommendation of values has importance for all APs. The proposal should therefore discussed within WG3. Decision:

1. Do not document in mapping table. Put a general boilerplate text to indicate 'default' values in Annex C

2. Discuss it in WG3 (general AP Guideline issue)

3. Use text in PDM Schema Usage Guide as a starting point.

4. Rogerio Barra to check whether PDM and CAx usage guides are consistentifferent possibilities: also put permissive list in Clause 5.2

bring it to WG3

5. Check whether legacy data will be invalidated

6. Postpone final solution until more investigation has taken place.

Incorporated Solutions:

It was decided that mappings do not have to provide values for all mandatory AIM attributes. General section included in the document to give guidance on how to populate those attributes.

Issue Reference No.: 230

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	20.08.1999
Country No.:	SWE-25	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1522 - 1542
Related Part/UoF:	S4	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

No value for mandatory AIM attribute

Issue Description:

The AIM entity event_occurrence has mandatory attributes id and name, for which the mapping does not or not always provide values. In principle, we consider this type of issue as critical for the following reasons: - It causes unnecessary effort during production use of the standard. - It is error prone, as the receiver may not be aware of the faked nature of this data. - It violates the principles of the ISO 9000 series of standards, because it is practically impossible to define the responsibility for this data in any reasonable way.

Proposed Solutions/Remarks:

Generate an issue against ISO 10303-41 (2nd Edition) to make both attributes optional. If this is not acceptable or agreeable, prescribe the values for faked data in the standard.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Addressed by solution for issue #229

Incorporated Solutions:

It was decided that mappings do not have to provide values for all mandatory AIM attributes. General section included in the document to give guidance on how to populate those attributes.

Issue Reference No.: 231

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	Date:	20.08.1999
Country No.:	SWE-26	Issue status:	accepted, Closed
Urgency:	minor	Type:	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	1542 1504 1542 1569
Related Part/UoF:	S4	Clause:	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

No value for mandatory AIM attribute

Issue Description:

The AIM entity effectivity has a mandatory attribute id, for which the mapping does not provide a value. In principle, we consider this type of issue as critical for the following reasons: - It causes unnecessary effort during production use of the standard. - It is error prone, as the receiver may not be aware of the faked nature of this data. - It violates the principles of the ISO 9000 series of standards, because it is practically impossible to define the responsibility for this data in any reasonable way.

Proposed Solutions/Remarks:

Generate an issue against ISO 10303-41 (2nd Edition) to make this attribute optional. If this is not acceptable or agreeable, prescribe the values for faked data in the standard.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
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Addressed by solution for issue #229

Incorporated Solutions:

It was decided that mappings do not have to provide values for all mandatory AIM attributes. General section included in the document to give guidance on how to populate those attributes.

Issue Reference No.: 232

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	Date:	20.08.1999
Country No.:	SWE-27	Issue status:	accepted, Closed
Urgency:	minor	Type:	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	1544
Related Part/UoF:	S4	Clause:	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

No value for mandatory AIM attribute

Issue Description:

The target AIM entities for the mapping of the application object product_class have, depending on the relevant mapping case, several mandatory attributes, for which the mapping does not provide any values. In principle, we consider this type of issue as critical for the following reasons: - It causes unnecessary effort during production use of the standard. - It is error prone, as the receiver may not be aware of the faked nature of this data. - It

violates the principles of the ISO 9000 series of standards, because it is practically impossible to define the responsibility for this data in any reasonable way.

Proposed Solutions/Remarks:

Generate issues against ISO 10303-44 (2nd Edition) to make all these attributes, including product_concept.market_context optional. If this is not acceptable or agreeable, prescribe the values for faked data in the standard.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Addressed by solution for issue #229

Incorporated Solutions:

It was decided that mappings do not have to provide values for all mandatory AIM attributes. General section included in the document to give guidance on how to populate those attributes.

Issue Reference No.: 233

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	20.08.1999
Country No.:	SWE-28	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1549
Related Part/UoF:	S4	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

No value for mandatory AIM attribute

Issue Description:

The AIM entity action has a mandatory attribute chosen method, for which the mapping does not provide a value. In principle, we consider this type of issue as critical for the following reasons: - It causes unnecessary effort during production use of the standard. - It is error prone, as the receiver may not be aware of the faked nature of this data. - It violates the principles of the ISO 9000 series of standards, because it is practically impossible to define the responsibility for this data in any reasonable way.

Proposed Solutions/Remarks:

Generate an issue against ISO 10303-41 (2nd Edition) to make this attribute optional. If this is not acceptable or agreeable, prescribe the values for faked data in the standard.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Addressed by solution for issue #229

Incorporated Solutions:

It was decided that mappings do not have to provide values for all mandatory AIM attributes. General section included in the document to give guidance on how to populate those attributes.

Issue Reference No.: 234

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	12.09.1999
Country No.:	SWE-29	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1662
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Missing mapping case label

Issue Description:

It is not visible immediately, that the reference path for complex_product.id belongs to mapping case #2, but not #1.

Proposed Solutions/Remarks:

Add the mapping case label #2. This issue becomes obsolete, if issue SWE-214-30 is accepted.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
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Addressed by solution for issue #235

Incorporated Solutions:

Due to the changed mapping of complex_product (see issue #235), there is one consistent mapping (to product.id) now for the mapping of complex_product.id.

Issue Reference No.: 235

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	12.09.1999
Country No.:	SWE-30	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1662
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Unnecessarily complex mapping of complex_product

Issue Description:

There is no real reason, why the mapping for the mapping cases #1 and #2 are so different.

Proposed Solutions/Remarks:

Mapping case #2 is simpler and sufficiently generic. Therefore remove mapping case #1.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Discussion:

The mapping would be simpler, if alternative_solution will be mapped in the same way as product_component.

Decision:

For consistency, map alternative_solution in the same way as product_component:

```
            product_definition

                    .....

        product_definition.formation ->
         product_definition_formation
 product_definition_formation.of_product ->
                    product <-
product_related_product_category.products[i]
    product_related_product_category <=
              product_category
product_category.name = 'alternative solution']
```

Incorporated Solutions:

Mapping of complex_product is the same now for all subtypes. Complex_product and its subtypes map consistently to product_definition_formation now.

Issue Reference No.: 236

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	12.09.1999
Country No.:	SWE-31	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1662 1667f 1672
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

No values for mandatory AIM attributes

Issue Description:

The target AIM entities for the mapping of the application object complex_product have, depending on the relevant mapping case, several mandatory attributes, for which the mapping does not provide any values. In principle, we consider this type of issue as critical for the following reasons: - It causes unnecessary effort during production use of the standard. - It is error prone, as the receiver may not be aware of the faked nature of this data. - It violates the principles of the ISO 9000 series of standards, because it is practically impossible to define the responsibility for this data in any reasonable way.

Proposed Solutions/Remarks:

Generate issues against ISO 10303-41 (2nd Edition) to make all these attributes, optional. If this is not acceptable or agreeable, prescribe the values for faked data in the standard. The task above is greatly simplified, if issue SWE-214-30 is accepted.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Addressed by solution for issue #229

Incorporated Solutions:

addressed by solution to issue #229:

Default values for mandatory attributes in AIM that are not used in the mapping do not have to be documented in mapping table. Additional section included in document.

Issue Reference No.: 237

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	12.09.1999
Country No.:	SWE-32	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1700
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Misleading structure of reference path

Issue Description:

The mapping cases for specification_category have the logical structure ONEOF (#1, #2) AND ONEOF (#3, #4) This logical structure is not visible in the reference path for the relationship to multi_language_string as description.

Proposed Solutions/Remarks:

Use the following template for this reference path: [(#1: ...) (#2: ...)] [(#3: ...) (#4: ...)]

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Addressed by solution for issue #212 (Improve OR case documentation)

Incorporated Solutions:

The reference paths to multi_language_string have been modified to start with ONEOF(#1, #2), merge in group and end with ONEOF(#3,#4).

Issue Reference No.: 238

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	13.09.1999
Country No.:	SWE-33	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1701f
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,

Sentence/abstract/keywords:

No value for mandatory AIM attribute

Issue Description:

The AIM entity product_concept_feature has a mandatory attribute name, for which the mapping does not provide a value. In principle, we consider this type of issue as critical for the following reasons: - It causes unnecessary effort during production use of the standard. - It is error prone, as the receiver may not be aware of the faked nature of this data. - It violates the principles of the ISO 9000 series of standards, because it is practically impossible to define the responsibility for this data in any reasonable way.

Proposed Solutions/Remarks:

Generate an issue against ISO 10303-44 (2nd Edition) to make this attribute optional. If this is not acceptable or agreeable, prescribe the values for faked data in the standard.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Addressed by solution for issue #229

Incorporated Solutions:

addressed by solution to issue #229:

Default values for mandatory attributes in AIM that are not used in the mapping do not have to be documented in mapping table. Additional section included in document.

Issue Reference No.: 239

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	13.09.1999
Country No.:	SWE-34	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1701 1703 1697 1655
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,

Sentence/abstract/keywords:

Missing mapping case

Issue Description:

The ARM contains some boolean switches, such as specification.package and
specification_category.implicit_exclusive_condition, which are mapped to specific subtypes in the AIM. The
mapping of the relationships to the application objects with these switches depends on whether or not the switch
in the connected application object is true. No mapping case is defined for this context however.

Proposed Solutions/Remarks:

Introduce the corresponding mapping cases for all such references to these application objects and use them for
those mappings.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
===
Decision:

1. For specification_expression: Add missing documentation of OR cases for the mapping of references to
specification

2. For specification_inclusion: Add missing documentation of OR casesf or the mapping of references to
specification

3. For specification: Keep mapping as it is. Add note to explain what IDENTICAL MAPPING of 'package' for
the two OR cases means

4. For class_category_association: Check where the problem is and correct it.

Incorporated Solutions:

Corresponding OR cases for assertions to objects with OR case mappings due to boolean switches have been
introduced.

Issue Reference No.: 240

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	13.09.1999
Country No.:	SWE-35	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1697 1664 1685 1692 1705
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,

Sentence/abstract/keywords:

Redundant reference path

Issue Description:

The reference path for the application objects below just repeats a structural constraint of the AIM.

Proposed Solutions/Remarks:

Remove the reference path.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Decision: Rejected. The Mapping Guidelines require to specify the complete supertype graph for AP-specific subtypes up to the IR entity.

Incorporated Solutions:

The Mapping Guidelines require to specify the complete supertype graph for AP-specific subtypes up to the IR entity.

Issue Reference No.: 241

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	13.09.1999
Country No.:	SWE-36	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1659f 1668f
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Mapping to a derived AIM attribute

Issue Description:

The mapping of an ARM attribute to a derived AIM attribute is theoretically complete, because the real mapping target can be found by analysis of the value derivation expression (function). This represents however a new and unnecessary burden for implementors. In addition, the mapping tables are inconsistent in this regard.

Proposed Solutions/Remarks:

Add the complete reference path correctly.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Addressed by solution on issue #221

Incorporated Solutions:

It has been decided use one consistent approach for mapping to derived attributes, which is to map to the derived attribute directly. Mapping changed where necessary.

Issue Reference No.: 242

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	Date:	13.09.1999
Country No.:	SWE-37	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1659f
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

No values for mandatory AIM attributes

Issue Description:

The AIM entity configuration_item has the mandatory attributes id and name, for which the mapping does not provide values. In principle, we consider this type of issue as critical for the following reasons: - It causes unnecessary effort during production use of the standard. - It is error prone, as the receiver may not be aware of the faked nature of this data. - It violates the principles of the ISO 9000 series of standards, because it is practically impossible to define the responsibility for this data in any reasonable way. Issue SWE-214-37 is fully contained in issue SWE-214-38

Proposed Solutions/Remarks:

Generate an issue against ISO 10303-44 (2nd Edition) to make these attributes optional. If this is not acceptable or agreeable, prescribe the values for faked data in the standard.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Addressed by solution on issue #229

Incorporated Solutions:

Default values for mandatory attributes in AIM that are not used in the mapping do not have to be documented in mapping table. Additional section included in document.

Values for configuration_item.name have been included in the mapping of class_structure_relationship.

Issue Reference No.: 243

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	Date:	13.09.1999
Country No.:	SWE-38	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1660f 1669f
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

No values for mandatory AIM attributes

Issue Description:

The AIM entity product_definition_relationship has the mandatory attributes id and name, for which the mapping does not provide values, at least not under all circumstances. In principle, we consider this type of issue

as critical for the following reasons: - It causes unnecessary effort during production use of the standard. - It is error prone, as the receiver may not be aware of the faked nature of this data. - It violates the principles of the ISO 9000 series of standards, because it is practically impossible to define the responsibility for this data in any reasonable way. Issue SWE-214-37 is fully contained in issue SWE-214-38

Proposed Solutions/Remarks:

Generate an issue against ISO 10303-41 (2nd Edition) to make these attributes optional. If this is not acceptable or agreeable, prescribe the values for faked data in the standard.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
===
Addressed by solution on issue #229

Incorporated Solutions:

addressed by solution to issue #229:
Default values for mandatory attributes in AIM that are not used in the mapping do not have to be documented in mapping table. Additional section included in document.

Issue Reference No.: 244

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	Date:	13.09.1999
Country No.:	SWE-39	Issue status:	rejected, Closed
Urgency:	minor	Type:	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	1660f 1661f 1674f 1675f
Related Part/UoF:	S7	Clause:	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Missing application objects in mapping table

Issue Description:

Although the application objects item_definition_instance_relationship, item_instance_relationship, and design_discipline_item_definition do not belong to UoF S7, its mapping tables provide essential information for the mapping of the application_objects below.

Proposed Solutions/Remarks:

Add appropriate references to the corresponding sections of the other mapping tables.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
===
Discussion: The concern (subtype is in different UoF than supertype and mapping does not indicate) was shared by the group. However, Mapping Table Guideline do not allow for. This is a general issue against the mapping

table guideline which cannot be resolved by AP214.

Decision: unpersuasive.

Incorporated Solutions:

Containment of the mentioned application objects to UoFs has been modified, some AOs have been included in several UoFs. References between UoF mappings are not foreseen by the mapping table guidelines.

Issue Reference No.: 245

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	13.09.1999
Country No.:	SWE-40	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1663f 1675f 1679f 1681f 1693f
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,

Sentence/abstract/keywords:

No value for mandatory AIM attribute

Issue Description:

The AIM entity product_definition_relationship has the mandatory attribute id, for which the mapping does not provide a value. In principle, we consider this type of issue as critical for the following reasons: - It causes unnecessary effort during production use of the standard. - It is error prone, as the receiver may not be aware of the faked nature of this data. - It violates the principles of the ISO 9000 series of standards, because it is practically impossible to define the responsibility for this data in any reasonable way.

Proposed Solutions/Remarks:

Generate an issue against ISO 10303-41 (2nd Edition) to make these attributes optional. If this is not acceptable or agreeable, prescribe the values for faked data in the standard.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Addressed by solution on issue #229

Incorporated Solutions:

addressed by solution to issue #229:

Default values for mandatory attributes in AIM that are not used in the mapping do not have to be documented in mapping table. Additional section included in document.

Issue Reference No.: 246

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	13.09.1999
Country No.:	SWE-41	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1664ff
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Mapping case definitions not useful

Issue Description:

The definitions of the mapping cases #1 and #2 are incomplete. Therefore, they require a good knowledge of the ARM and the IRs together with a very careful reading of the mapping table to understand, what they are saying.

Proposed Solutions/Remarks:

Make clear in the definitions of both mapping tables, that they are only relevant in the context of the configuration of a process plan.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision: Improve documentation as proposed

Incorporated Solutions:

OR case documentation for assertion 'configuration to process_plan' has been improved.

Issue Reference No.: 247

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	13.09.1999
Country No.:	SWE-42	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1664ff
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

No values for mandatory AIM attributes

Issue Description:

The following AIM entities have mandatory attributes, for which the mapping does not provide values. AIM entity attribute ---------- --------- effectivity id effectivity_context_assignment role effectivity_context_role name In principle, we consider this type of issue as critical for the following reasons: - It causes unnecessary effort during production use of the standard. - It is error prone, as the receiver may not be aware of the faked nature of this data. - It violates the principles of the ISO 9000 series of standards, because it is practically impossible to define the responsibility for this data in any reasonable way.

Proposed Solutions/Remarks:

Generate issues against ISO 10303-41 (2nd Edition) to make these attributes optional. If this is not acceptable or agreeable, prescribe the values for faked data in the standard.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
===
Addressed by solution on issue #229

Incorporated Solutions:

addressed by solution to issue #229:
Default values for mandatory attributes in AIM that are not used in the mapping do not have to be documented in mapping table. Additional section included in document.

Issue Reference No.: 248

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	13.09.1999
Country No.:	SWE-43	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1672ff
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

No values for mandatory AIM attributes

Issue Description:

The following AIM entities have mandatory attributes, for which the mapping does not provide values. AIM entity attribute ---------- --------- product_definition id product_definition_formation id product id product name product frame_of_reference In principle, we consider this type of issue as critical for the following reasons: - It causes unnecessary effort during production use of the standard. - It is error prone, as the receiver may not be aware of the faked nature of this data. - It violates the principles of the ISO 9000 series of standards, because it is practically impossible to define the responsibility for this data in any reasonable way.

Proposed Solutions/Remarks:

Generate issues against ISO 10303-41 (2nd Edition) to make these attributes optional. If this is not acceptable or agreeable, prescribe the values for faked data in the standard.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
===
Addressed by solution on issue #229

Incorporated Solutions:

addressed by solution to issue #229:

Default values for mandatory attributes in AIM that are not used in the mapping do not have to be documented in mapping table. Additional section included in document.

Issue Reference No.: 249

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	13.09.1999
Country No.:	SWE-44	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1676f
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Missing mapping case label

Issue Description:

The condition specified in the reference path for application object instance_placement is only valid for mapping case #1, but is is not labelled as such.

Proposed Solutions/Remarks:

Add the mapping case label #1

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Decision: Include mapping case label #1 in reference path as proposed

Incorporated Solutions:

Mapping rule has been included in appropriate OR case.

Issue Reference No.: 250

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	13.09.1999
Country No.:	SWE-45	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1676f
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Missing mapping case label

Issue Description:

The reference path for physical_instance.description is only valid for mapping case #4, but is is not labelled as such.

Proposed Solutions/Remarks:

Add the mapping case label #4

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision: Add the mapping case label #4 as proposed

Incorporated Solutions:

OR cases #3 and #4 have been removed as in any case physical_instance maps to product_definition.

Issue Reference No.: 251

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	13.09.1999
Country No.:	SWE-46	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1683ff
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

No values for mandatory AIM attributes

Issue Description:

The following AIM entities have mandatory attributes, for which the mapping does not provide values. AIM entity attribute ---------- --------- product_definition_formation id product id product name product frame_of_reference In principle, we consider this type of issue as critical for the following reasons: - It causes unnecessary effort during production use of the standard. - It is error prone, as the receiver may not be aware of the faked nature of this data. - It violates the principles of the ISO 9000 series of standards, because it is practically impossible to define the responsibility for this data in any reasonable way.

Proposed Solutions/Remarks:

Generate issues against ISO 10303-41 (2nd Edition) to make these attributes optional. If this is not acceptable or agreeable, prescribe the values for faked data in the standard.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Addressed by solution on issue #229

Incorporated Solutions:

addressed by solution to issue #229:

Default values for mandatory attributes in AIM that are not used in the mapping do not have to be documented in mapping table. Additional section included in document.

Issue Reference No.: 252

Originator:	Bernd G. Wenzel, Eurostep, Bernd.Wenzel@Eurostep.com	**Date:**	13.09.1999
Country No.:	SWE-47	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1688ff
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Missing mapping cases?

Issue Description:

The mapping cases #1 and #2 as defined for application object product_component do not seem to make sense as they are used in the context of the attribute instance_required.

Proposed Solutions/Remarks:

Define and use appropriate mapping cases.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Clarification:

#1, #2 adresses the value of the attribute instance_required, additional OR cases are need for the multilanguage distinction

Decision: Improve the OR case documentation to include OR cases for instance_required attribute

Incorporated Solutions:

4 OR cases have been introduced for the mapping of product_component:

2 OR cases are for the multi-language attribute description, 2 OR cases are for

product_component.instance_required (values TRUE or FALSE)

Issue Reference No.: 253

Originator:	Mohsen Azari, Scania CV AB, mohsen.azari@scania.com	**Date:**	02.09.1999
Country No.:	SWE-48	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1638, Table 28
Related Part/UoF:	S6	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Misspelling, wrong reference in mapping table.

Issue Description:

Wrong attribute name in the reference path of the mapping of classification_association to general_classification (as associated_classification).

Proposed Solutions/Remarks:

Change ""classification_assignment.assigned_class ->"" to ""classification_assignment.assigned_classification -
>""

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision: Correct mapping as proposed

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 254

Originator:	Mohsen Azari, Scania CV AB, mohsen.azari@scania.com	**Date:**	02.09.1999
Country No.:	SWE-49	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1652, Table 28
Related Part/UoF:	S6	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Misspelling, wrong reference in mapping table.

Issue Description:

The constrain on ""product_category.name"" in the reference path of the mapping of
""SPECIFIC_ITEM_CLASSIFICATION.classification_type"" is not consistent with the information in Clause
4.2.450.3, Page 422.

Proposed Solutions/Remarks:

Change ""(product_category.name = 'regulation')"" to ""(product_category.name = 'regulated')""

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision: Correct mapping as proposed

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 255

ISO/DIS 10303-214 – Issue log

Originator:	Mohsen Azari, Scania CV AB, mohsen.azari@scania.com	**Date:**	02.09.1999
Country No.:	SWE-50	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	1652, Table 22
Related Part/UoF:	PR1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Missing constrains in referens path

Issue Description:

In order to satisfy the information requirement in Clause 4.2.226, Page 242, the reference path of the mapping of ""GENERAL_PROPERTY.property_type"" should be constrained.

Proposed Solutions/Remarks:

Add {(general_property.name) (general_property.name = 'axle distance') (general_property.name = 'overall axle distance') (general_property.name = 'theoretical axle distance') (general_property.name = 'track') (general_property.name = 'wheel space')} to reference path.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===
Decision:

Add permissive list values from ARM in mapping table as proposed

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 256

Originator:	Mohsen Azari, Scania CV AB, mohsen.azari@scania.com	**Date:**	02.09.1999
Country No.:	SWE-51	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	792 and 819, Table 5
Related Part/UoF:	E1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Redundant mapping cases

Issue Description:

There are two by two identical mapping cases in mapping table

Proposed Solutions/Remarks:

Remove redundant mapping cases

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Addressed by solution for issue #212: Improve OR case documentation

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 257

Originator:	Erik Höppö, Scania, ERIK.HOPPO@scania.com	**Date:**	05.10.1999
Country No.:	SWE-52	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.226
Related Part/UoF:	PR1	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

Property type attribute walue is wrong

Issue Description:

Property type attribute walue is wrong

Proposed Solutions/Remarks:

The concept 'Axle Distance' to be changed to 'Wheelbase' according to findings of the TBB project. This is valid in the text as well as in figure 39.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

accepted (change mapping table also). Change all three values (update from Erik for Figure 39, see also PDMI2/WG11 document).

Incorporated Solutions:

Text changed to 'theoretical wheelbase'.
Figure changed
Text of Figur changed

Issue Reference No.: 258

Originator:	Erik Höppö, Scania, ERIK.HOPPO@scania.com	**Date:**	05.10.1999
Country No.:	SWE-53	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	04.02.69
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

Missing relationship

Issue Description:

Missing relationship

Proposed Solutions/Remarks:

Relationship from 'activity_element_select', 'effective_element_select', 'documented_element_select', 'approval_element_select', 'security_element_select' and 'general_organizational_data_select' is needed. This in order to have equal structure rules for this entity as is for 'product_structure_relationship'. This relationship entity is entitled to be classified for security, retention and due to approval etc. in the same manner as is valid for 'product_structure_relationship'

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

accepted: class_structure_relationship is added to all the select types

Incorporated Solutions:

done as proposed.

Issue Reference No.: 259

Originator:	Erik Höppö, Scania, ERIK.HOPPO@scania.com	**Date:**	05.10.1999
Country No.:	SWE-54	**Issue status:**	rejected, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	04.02.69
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

Include product_class to the product_function_component_select.

Issue Description:

There is a need to create a structure of product_class objects that the PDMI2 WG 1,3 has found to be essential and used by all companies within the automotive industry. Typically to manage component product classes (i.e. engines, gearboxes...) for the documentation of components that then is used in one or more vehicle product classes. Currently the product_class_relationship object is misused to express the hierarchical relationship which is needed to be subject of all support that is mentioned by issue SWE-214-53.

Proposed Solutions/Remarks:

Include product_class to the product_function_component_select.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

rejected

Incorporated Solutions:

no action required.

Issue Reference No.: 260

Originator:	Erik Höppö, Scania, ERIK.HOPPO@scania.com	**Date:**	05.10.1999
Country No.:	SWE-55	**Issue status:**	rejected, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	04.02.92
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

Configured_element needs to be associated to 'class_structure_relationship' and 'product_structure_relationship'

Issue Description:

The 'product_structure_relationship' object is currently associated from 'effectivity_assignment' which has the same kind of purpose, to indicate whether a relationship is valid, or not, as configuration.

Proposed Solutions/Remarks:

Configured_element needs to be associated to 'class_structure_relationship' and 'product_structure_relationship' objects in order to make it possible to allow configuration controlled product structure relationship.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

not persuasive

Incorporated Solutions:

no action required.

Issue Reference No.: 261

ISO/DIS 10303-214 – Issue log

Originator:	Erik Höppö, Scania, ERIK.HOPPO@scania.com	**Date:**	05.10.1999
Country No.:	SWE-56	**Issue status:**	rejected, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	04.02.92
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

"The values for configuration_type; 'design' and 'usage' are difficult to apply, when the values applies to different associated entities"

Issue Description:

The values for configuration_type; 'design' and 'usage' are difficult to apply, when the values applies to different associated entities. This would mean that a configuration, where the configuration_type 'design' is selected, would be excluded once the design study is completed.

Proposed Solutions/Remarks:

The suggestion is either to remove the attribute, change the values to reflect the state of the configuration, (application_context possibly). Alternatively, if the attribute is kept, the same values should apply to all associations.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
==
no persuasive at DIS level

Incorporated Solutions:

no action required.

Issue Reference No.: 262

Originator:	Erik Höppö, Scania, ERIK.HOPPO@scania.com	**Date:**	05.10.1999
Country No.:	SWE-57	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.454
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

A specification_expression containing an OR expression, cannot be included with any kind of automatic mechanism

Issue Description:

A specification_expression containing an OR expression, cannot be included with any kind of automatic mechanism. The resulting product_specification must then be corrected by manual or other means before use. This means that the definition and the first note must be rewritten in the manner that the OR expression for inclusion not is allowed.

Proposed Solutions/Remarks:

The 3rd note says that a NOT expression actually defines an exclusion. In this situation, the OR expression described above makes sense, a number of specification objects may be excluded from a product_specification if present. This clarification should be described in an additional note.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

accepted, exclude the oneof and the or operators in the definition of specification_inclusion.included_specification Add note, that NOT should be used not one more that one level of the expression (i.e at most one one level)

Incorporated Solutions:

done as proposed.

Issue Reference No.: 263

Originator:	Erik Höppö, Scania, ERIK.HOPPO@scania.com	**Date:**	05.10.1999
Country No.:	SWE-58	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	04.02.06
Related Part/UoF:	S5	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

The value 'Precedence' for relation_type does not give the impression of 'priority' between different activity objects

Issue Description:

The value 'Precedence' for relation_type does not give the impression of 'priority' between different activity objects.

Proposed Solutions/Remarks:

The value should be changed to an expression that portrays the preference between optional activities. The proposal is to rename 'Precedence' to 'Priority'

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

not accepted, leave it as it is since ...

Incorporated Solutions:

no action required.

Issue Reference No.: 264

Originator:	Erik Höppö, Scania, ERIK.HOPPO@scania.com	**Date:**	05.10.1999
Country No.:	SWE-59	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	04.02.06
Related Part/UoF:	S5	**Clause:**	Cl. 4.2 (ARM) ,

Sentence/abstract/keywords:

The value 'decomposition' and 'hierarchy' seams to define the same type of relationship

Issue Description:

The value 'decomposition' and 'hierarchy' seams to define the same type of relationship.

Proposed Solutions/Remarks:

The proposal is to remove 'hierarchy' from the relation_type value set.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

delete PLV 'hierachy'

replace 'components' by 'subactivities' in the definition of PLV decomposition

Incorporated Solutions:

done as proposed.

Issue Reference No.: 265

Originator:	Erik Höppö, Scania, ERIK.HOPPO@scania.com	**Date:**	05.10.1999
Country No.:	SWE-60	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	04.02.02
Related Part/UoF:	S5	**Clause:**	Cl. 4.2 (ARM) ,

Sentence/abstract/keywords:

There are a number of values for the activity_type, but no one to define an activity for co-ordination of sub activities

Issue Description:

There are a number of values for the activity_type, but no one to define an activity for co-ordination of sub activities.

Proposed Solutions/Remarks:

The proposal is to add the value 'Co-ordination' to the list of values.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

accepted, add 'co-ordination': An activity to manage possibly several sub-activities related to this activity by an acivity_relationship with PLV 'decomposition' of attribute relation_type

Incorporated Solutions:

done as proposted.

Issue Reference No.: 266

Originator:	Erik Höppö, Scania, ERIK.HOPPO@scania.com	**Date:**	05.10.1999
Country No.:	SWE-61	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	04.02.23
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) ,

Sentence/abstract/keywords:

The definition of relation_type is too scant.

Issue Description:

The definition of relation_type is too scant.

Proposed Solutions/Remarks:

There should be a list of values describing the meaning of the relationship or at least some examples.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

add PLV precedence and sequence from AP212, and introduce dependency (instead of decomposition of AP212) and add example that the assembly approval is dependent on the approval of its constituents/components

Incorporated Solutions:

Done as proposed.

Issue Reference No.: 267

Originator:	Erik Höppö, Scania, ERIK.HOPPO@scania.com	**Date:**	05.10.1999
Country No.:	SWE-62	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.181
Related Part/UoF:	S4	**Clause:**	Cl. 4.2 (ARM) ,

Sentence/abstract/keywords:

The formulation in the example is not accurate, the statements 'start of production' and 'end of production' may be interpreted in many different ways

Issue Description:

The formulation in the example is not accurate, the statements 'start of production' and 'end of production' may be interpreted in many different ways, depending of the kind of data associated, or the systems involved.

Proposed Solutions/Remarks:

An example reflecting the referred data by the attribute 'event_context' should be described.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

accepted, create a link in the example to the event_reference (if populated) for example product_class

Incorporated Solutions:

done as proposted.

Issue Reference No.: 268

Originator:	Erik Höppö, Scania, ERIK.HOPPO@scania.com	**Date:**	05.10.1999
Country No.:	SWE-63	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.373
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) ,

Sentence/abstract/keywords:

The definition of the meaning of the 'non replaceable standard' value is ambiguous.

Issue Description:

The definition of the meaning of the 'non replaceable standard' value is ambiguous.

Proposed Solutions/Remarks:

The word ""any"" should be replaced with ""all"". The reference to a market context in the examples is not sufficient, as a management of market context is not defined within the scope of AP214.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

1. ok

2. leave it as it is, find perhaps a better example

Incorporated Solutions:

done as proposed, removed phrase 'market context' from example.

Issue Reference No.: 269

Originator:	Erik Höppö, Scania, ERIK.HOPPO@scania.com	**Date:**	05.10.1999
Country No.:	SWE-64	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.375 4.2.376
Related Part/UoF:	S8	**Clause:**	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

The relationships between operations should be dependent of the combination of 4.2.375 Process_plan and 4.2.371 Process_operation.

Issue Description:

The relationships between operations should be dependent of the combination of 4.2.375 Process_plan and 4.2.371 Process_operation.

Proposed Solutions/Remarks:

The attributes related and relating should be associated with 4.2.376 Process_plan_operation_ assignment. This change would allow generic descriptions of process operations, used for several process plans, where the relation_type (decomposition, sequence or alternative) can be managed separately for each case.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

- rename process_operation to process_operation_definition

- create subtype of action_method with name "process_operation"

- rename process_plan_operation_assignment to process_operation_occurence

- move references on former process_operation to process_operation_occurence

Incorporated Solutions:

done as proposed. additionally, process_operation_definition_relationship introduced, relation_type in analogy to process_plan_relationship.

-> mapping done

Issue Reference No.: 270

Originator:	Erik Höppö, Scania, ERIK.HOPPO@scania.com	**Date:**	05.10.1999
Country No.:	SWE-65	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.375 4.2.376
Related Part/UoF:	S8	**Clause:**	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

The assignment of resources should be dependent of the combination of 4.2.375 Process_plan and 4.2.371 Process_operation.

Issue Description:

The assignment of resources should be dependent of the combination of 4.2.375 Process_plan and 4.2.371 Process_operation.

Proposed Solutions/Remarks:

The attribute operation should be associated to 4.2.376 Process_plan_operation_assignment. This change would allow generic descriptions of resource assignments, used for several process plans, where the resource_definition can be managed separately for each case.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Do as proposted.

Incorporated Solutions:

done as proposted. Definition of AO and attributes updated accordingly.

Issue Reference No.: 271

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-1	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S4	**Clause:**	Cl. 4.2 (ARM) ,

Sentence/abstract/keywords:

convention for effectivity

Issue Description:

It is not clear whether the primary_definition or secundary_definition define dates that are included or excluded from the effectivity interval.

Proposed Solutions/Remarks:

We propose the following convention: - the first bound, defined by primary_definition or derived from the effectivity relationship, is included in the effectivity interval; - the second one is excluded This convention, if agreed, should be included as a normative text in the definition of the application object.

 Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

accepted, include the convention as proposed.

NOTE: might be appropriate for 41 as well

 Incorporated Solutions:

Added convention to definitions of start_definition and end_definition

Issue Reference No.: 272

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-2	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S4	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

definition of the attribute of effectivity should be amended

 Issue Description:

In order to be consistent with the convention specified within the object effectivity, the definition of the attribute should be amended as follows: ""The end_date specifies the date and time from which the dated_configuration is no more valid. When the end_date is not specified, the dated_configuration is considered as valid forever from the stard_date.""

 Proposed Solutions/Remarks:
 Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

accepted, has to be checked for consitency with the new effectivity model (changes during Workshop)

 Incorporated Solutions:

stated in definition of attribute end_date that beyond the end_date the date of the validity is not known any longer.

Issue Reference No.: 273

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-3	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S4	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

constraints regarding the possible effectivity objects associated with objects are unclear

Issue Description:

When an object refers to another, the constraints regarding the possible effectivity objects associated with both objects are unclear. E.g. Does the referring object inherit from the effectivity dates of the referred object? Can the effectivity dates assigned to the referring object be inconsistent with the effectivity dates assigned to the referred object?

Proposed Solutions/Remarks:

We propose the addition of the following textual rules: "" Note - in the next statements, the following definitions apply: An instance A refers directly to an instance B if an attribute of A is equal to B. An instance A refers indirectly to an instance B if a suite of instances exists, starting from A and ending in B so that the ith instance refers directly to the (i+1)th instance. In the context of this application protocol, the following constraints apply: 1. - absence of assigned effectivity to an instance of an application object shall be interpreted as specifying that the information provided by this instance is always valid; 2. - when an effectivity is assigned to an instance of an application object, any instance of an application object that refers directly or indirectly to this instance gets, by default, the same effectivity interval. 3. - When effectivity data are assigned to both an instance A of an application object and to an instance B that is referred to by the first one, either directly or indirectly, and when the concerned_organizations are the same for both effectivity data, then the effectivity bounds assigned to the instance A shall define a validity interval smaller than the validity interval of the referred instance B; ""

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
===
Alternatives

1. default: unknown

2. no accepted, because no inheritance of effectivity information

3. propably valid, but almost imposible to wirte a rule or to make it normative text, add clarifying note in clause 4.2 (effectivity, retention) .

Discuss the whole topic in plenary again:

1, accepted

2. not accepted (no inheritance)

3. add in recom. practice

Incorporated Solutions:

1. inserted text in effectivity_assignment that absence of effectivity docs not imply invalidity and no statement is made about validity outside an interval of effectivity.

2. no action required

3. sent to ProSTEP

Issue Reference No.: 274

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-4	**Issue status:**	rejected, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) ,

Sentence/abstract/keywords:

The definition of the association_type ""availability"" in class_specification_association is ambiguous

Issue Description:

The definition of the association_type ""availability"" in class_specification_association is ambiguous as it does not precise whether a specification that is not associated with a product_class, may be referred to by a specification_expression or a specification_inclusion or a configuration or a product_specification.

Proposed Solutions/Remarks:

Add the following normative text in the definition of the object Specification: "" The following constraints apply in the context of this application protocol: - a specification shall not be associated with a product_class, using class_specification_association, if its specification_category is not associated with this product_class, using class_category_association; - Any specification, belonging to a specification_category that is associated with a particular product_class, may be referred to by a specification_expression, a specification_inclusion, regardless this specification is associated with this product_class through an instance of class_specification_association; - An instance of specification shall not be referred to by a product_specification (attribute defining_specification) if this specification is not associated, through at least an instance of class_specification_association, with the product_class referred to as product_specification.associated_product_class ; ""

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

restriction seems to be to company specific or too restrictive, as class_category_associations are not required in all cases (-> rejected)

Incorporated Solutions:

no action required.

Issue Reference No.: 275

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-5	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S4	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

redundant ways to describe the occurrence of a component in an assembly

Issue Description:

We have presently two partially redundant ways to describe the occurrence of a component in an assembly. We can chose to use: - assembly_relationship or its subtypes and in particular promissory_usage with a possible associated effectivity, or - manufacturing_configuration, the item_version of the assembly being referred to by the attribute is_solution_for. Example: Let'consider a part A which includes the components B and C. Let be VA1 the active version of A, respectively VB1 for B, VC1 for C Let be ddidA, ddidB, ddidC the definitions views of VA1, VB1, VC1 Let be sgB, sgC single_instances of ddidB and ddidC In order to specify that A, in 99, contains B, resp. C, you can write: 1st method: - an instance of next_higher_assembly, NHAB, that relates ddidA with sgB - an instance of effectivity_assignment that refers to NHAB and to an effectivity with primary_definition=1/1/1999 and secundary_definition=31/12/1999 2nd method: - an instance of dated_configuration with - start_date=1/1/1999 and end_date=31/12/1999 - configured_element= sgB - is_solution_for = VA1

Proposed Solutions/Remarks:

remove item_version from configuration_context_select, considering also that such a possibility does not exist in AP203.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
===
accepted, remove also product_identification from the context_select

Incorporated Solutions:

done as proposed.
select removed, because not required any longer

Issue Reference No.: 276

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-6	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

no predefined value proposed or even applicable for the class_condition_association.condition_type

Issue Description:

In order to describe a usage case of an alternative solution, AP214 requires to use the object Configuration with configuration.configuration_type=""usage"". If configuration.is_solution_for refers to a class_condition_association then class_condition_association.condition_type is intended to be ""part usage"" In order to describe a case of required design for a product_function or a product_component, AP214 requires to use the object Configuration with configuration.configuration_type=""design"". But, there is no predefined value proposed or even applicable for the class_condition_association.condition_type. In addition, the list of predefined values is not extensible (it is one of the rare closed lists). Several amendments are possible: 1- use the value ""part usage"" (this would require to update the definition of this predefined value) or, 2- create a new predefined value (""design"") or, 3- use any non predefined value and do not take into account the value of condition_type when querying what are the design cases required for a given product_function. Chosing 3 would lead to the question: do we have to take into account the value of condition_type when querying what are the usage cases of an alternative solution (in other words, if there is no mandatory value for the design case, is the value ""part usage"" of condition_type mandatory or for information only?). In fact, we have two attributes configuration.configuration_type and class_condition_association.condition_type that are redundant if the case where the configuration refers to the class_condition_association.

Proposed Solutions/Remarks:

We propose the following: - Add a new predefined value for condition_type (i.e. ""design"") but add also a sentence in the definition of the attribute stating: « The attribute condition_type is for information only and shall not be interpreted when querying design cases or usage cases, i.e. for such a query, only the value of configuration.configuration_type shall be considered, as it has an impact on the kind of object that shall be referred to by configuration.configured_element. « Alternate proposal: Add a new predefined value ""design case"": "" 'design case': The Specification_expression specifies a condition when a given object has to be designed and verified. Note - this value may be used to precise when a given product_function or a given product_component has to be studied by the Design department so that this latter provides solutions appropriate for the case specified by associated_condition and associated_product_class. ""

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
===
accepted, make it a PL, include value "design case" , priority of value of configuration.configuration_type

Incorporated Solutions:

done as proposted.

Issue Reference No.: 277

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-7	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

attribute in class_specification_association missing

Issue Description:

In some real cases, design rules like «if Spec XX then spec YY» cannot be dealt with specification_inclusion. E.g. the following couple of conditions cannot be represented: if «aimed market=Italy» then «radio RDS is a proposed option»; if «aimed market=Lybia» then «radio RDS is not a proposed option» In fact, the problem is that class_specification_association.association_type is not sufficient to express an additional condition. I.e. when a specification is associated with a product_class with the association_type 'option' or 'replaceable standard»', there is no way to add a condition that precises the association.

Proposed Solutions/Remarks:

Add the following attribute in class_specification_association: condition: OPTIONAL specification_expression; condition: specifies an expression that defines the condition for which the association_type is valid.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

not accepted

Incorporated Solutions:

no action required.

Issue Reference No.: 278

Originator:	JC. Guyot, PSA/P. Huau,GOSET	**Date:**	
Country No.:	FRA-8	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

occurrence of product_component or product_function

Issue Description:

It is needed to be able to locate an occurrence of a product_component or of a function in the context of a super product_component, and to add to the placement information a usage case (configuration).

Proposed Solutions/Remarks:

Create the entities function_unit and component_unit that identify respectively an occurrence of a product_function or of a product_component. Create the entity unit_placement, same as instance_placement by

with replacing the attribute placed_instance by the attribute placed_unit pointing to a select type containing function_unit and component_unit.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

partially accepted: add component placement as new AO (placement of componetents into other components) (same pattern as for instance_placement

restrict for placed_component to have a model_property and any explicit placed instance / component in product component ... (see Aufzeichnungen).

add permissive list value of product_structure-relationship.relation_type 'occurrence' and provide appropriate definition -> in the mapping: use also 'occurrence' (when using 'occurrence', the related shall only be a product_component)

Incorporated Solutions:

Example incorporated.

1) done as proposed.

2) done as proposed.

Issue Reference No.: 279

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-9	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	PR1	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

definition of Value_range not correct

Issue Description:

The definition of Value_range indicates that the interval is only applicable to a geometric_dimension while in reality it can be applied to any type of property_value and other object such as Selected_instance.selected_quantity.

Proposed Solutions/Remarks:

Correct the definition of Value_range in order to remove the restriction that is implied by the definition.

Discussed Solutions:

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===

accepted, remove "of the Geometric_dimension" in the whole clause 4.2.528 (4 times)

ISO/DIS 10303-214 – Issue log

Incorporated Solutions:

done as proposed and removed note.

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-10	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S6	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

The definition of classification_system does not correspond to what this object actually identifies

Issue Description:

The definition of classification_system does not correspond to what this object actually identifies , i.e. dictionaries of conventional terms.

Proposed Solutions/Remarks:

Rewrite the definition as follows: ""A classification_system identifies an organized set of technical data. Example - a dictionnary collecting the conventional definitions of technical properties is an example of classification_system. ""

Discussed Solutions:

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==
accepted, but use AP212 for definition, Example is ok!

Incorporated Solutions:

done as proposed.

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-11	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

Amend the definition for document_source_property

Issue Description:

Reading the definition of document_source_property and the accompanying notes, it is not clear, when you consider the source property of a digital_file, whether the document_source_property.source_name only contains the name of the directory where the file is located or if it also contains a file name. E.g., considering the linking

mechanism in Unix, the command ""ln -s"" creates a link (=shortcut) to a file located in another directory and the result is actually two file names that identify the same location on the disk. On the other hand, if the applied_to is a document_representation containing several files, the document_source_property cannot contain a file name and shall only contain a directory name.

Proposed Solutions/Remarks:

Amend the definition in order to specify that: - in the case where the document_source_propery is applied to one or more digital_file, source_name shall not contain the name of the files but only the name of the repository that contains the files; - shortcuts, in Unix or Windows operating systems, should be dealt with, using instances of the entity alias_identification (information to be provided in a note)

Discussed Solutions:

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===

solved by #307

Incorporated Solutions:

no action required.

Issue Reference No.: 282

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-12	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S3	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

Contexts for objects referenced by assembly_relationship

Issue Description:

An assembly_relationship relates an assembly_definition and an item_instance. When this item_instance is defined by a design_discipline_item_definition, the assembly_definition and the ddid should not have completely different relevant contexts (e.g. Mechanical definition view for the manufacturing phase versus Electrical definition view)

Proposed Solutions/Remarks:

Add a rule in the ARM and in the AIM enforcing the assembly_definition and the ddid share at least one application_context.

Discussed Solutions:

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===

make sense. But the AIM rule may cause IO-problems. Needs to be discussed in plenary.

ARM/AIM rule. The intersection of the application_context is not empty fo the assembly_definition and the ddid of the item_instance.

Needs furter investigation (Jim Kindrick, ...)

Incorporated Solutions:

added rule to definition of AO.

=>

-redeclare as 5.2 issue -> global rule required.

Issue Reference No.: 283

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-13	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S4	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

The meaning of the case where effectivity.concerned_organization is an empty set is not clear

Issue Description:

The meaning of the case where effectivity.concerned_organization is an empty set is not clear: does it mean that the effectivity applies to any organization or to no organization.

Proposed Solutions/Remarks:

Add in the definition of the attribute: ""The case where effectivity.concerned_organization is an empty set means that the effectivity regards any organization that may consider the product data , the effectivity is applied to.""

Add, then, the following note: ""Note - as effectivity is most of time organization dependent, it is recommended to always populate effectivity.concerned_organization.""

Discussed Solutions:

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===

accepted, add clarification/addition to the definition of .concerned_organization

Incorporated Solutions:

done as proposted.

Issue Reference No.: 284

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-14	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S4	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

The entity effectivity has an attribute concerned_organization whereas manufacturing_configuration has not

Issue Description:

The entity effectivity has an attribute concerned_organization whereas manufacturing_configuration has not. As effectivity intervals, whatever they are date based or lot number based or serial number based, are usually organization dependent, the attribute concerned_organization should be added to the object manufacturing_configuration. In addition, the same convention should be specified as regards the case where no concerned organization is specified.

Proposed Solutions/Remarks:

Add the missing attribute with the same cardinality as in the object Effectivity.

Discussed Solutions:

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==

accepted

Incorporated Solutions:

done as proposted.

Issue Reference No.: 285

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-15	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	G_1-8	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

As the attribute model_extent defines a radius, i.e. a length measure, the value of the radius should be expressed with a length_unit

Issue Description:

As the attribute model_extent defines a radius, i.e. a length measure, the value of the radius should be expressed with a length_unit.

Proposed Solutions/Remarks:

Either model_extent should refer to value_with_unit or it should be stipulated in the definition of the attribute that the radius shall be expressed with respect to the length unit of the cartesian_coordinate_space referred to by the attribute is_defined_in.

Discussed Solutions:

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==

- improve the definition of the attribute in claus 4.2 as proposed

- improve geometric_model.model_extent as well as external_geometric_model.model_extent

Incorporated Solutions:

done as proposed.

Issue Reference No.: 286

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-16	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S2	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

geometric_or_external_model_select, shape_definition_select Select types are identical.

Issue Description:

Both Select types are identical.

Proposed Solutions/Remarks:

Remove one of the two select types.

Discussed Solutions:

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==

- do as proposed

- rename remaining SELECT type to geometric_model_select

Incorporated Solutions:

decision on issue changed
go back to DIS version

Issue Reference No.: 287

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-17	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S4	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

mapping of manufacturing_configuration.is_solution_for when this attribute refers to product_identification or to item_version.

Issue Description:

I could not find the mapping of manufacturing_configuration.is_solution_for when this attribute refers to product_identification or to item_version.

Proposed Solutions/Remarks:

The mapping-table has to be completed or item_version and product_identification shall be removed from configuration_context_select.

Discussed Solutions:

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===
Addressed by solution on issue #275 (ARM modification)

Incorporated Solutions:

Mapping of manufacturing_configuration has been changed.
manufacturing_configuration to product_design is the only assertion in the role "as is_solution_for". Assertions to product_identification and item_version are mapped in the mapping of product_design.

Issue Reference No.: 288

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-18	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S3	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

make_from_relationship is the only kind of item_definition_relationship that has an attribute Name

Issue Description:

This AO is the only kind of item_definition_relationship that has an attribute Name. However, it is not clear why this attribute is needed here and why it is not included in the other kinds of item_definition_relationship.

Proposed Solutions/Remarks:

For consistency, remove the attribute Name or provide further explanations in the definition about its intended usage.

Discussed Solutions:

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===

accepted (delete it)

Incorporated Solutions:

done as proposed.

Issue Reference No.: 289

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-19	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S8	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

The AO process_operation_input_or_output should not have an attribute Quantity

Issue Description:

The AO process_operation_input_or_output should not have an attribute Quantity as the fact that process_operation_input_or_output_select contains the object item_instance already enables to specify a quantity. Otherwise, it should be specified whether the attribute Quantity has precedence on the quantity specified within the item_instance.

Proposed Solutions/Remarks:

Remove the attribute Quantity (preferred solution) or include a statement about precedence of quantity attributes.

Discussed Solutions:

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===

Remove the quantity attribute.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 290

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-20	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S8	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

sentence in the definition of process_operation_input_or_output.placement is incorrect

Issue Description:

The following sentence in the definition of process_operation_input_or_output.placement is incorrect (see in particular the "." after the first "if present"). "The reference coordinate system is either the coordinate system of the reference tool, if present. for the concerned process_operation or, if no reference tool is present, the coordinate system of the Process_operation itself."

Proposed Solutions/Remarks:
Discussed Solutions:

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===

Replace "." by "," in the description of Process_operation_input_or_output.placement

Incorporated Solutions:

done as proposed.

Issue Reference No.: 291

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-21	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

attribute address should not be in the AO person but in the AO person_in_organization

Issue Description:

The AO person has an optional attribute address that specifies the location of the office of the person. But, as a person may belong to several organizations (cf. Inverse attribute associated_organization), he may have actually several addresses. Therefore, the attribute address should not be in the AO person but in the AO person_in_organization.

Proposed Solutions/Remarks:

Move the attribute address from the object person into the object person_in_organization.

Discussed Solutions:

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===

see #108

Incorporated Solutions:

see # 108.

Issue Reference No.: 292

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-22	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

The reference path of the mapping of item_instance_relationship.relating is incorrect in some cases

Issue Description:

The reference path of the mapping of item_instance_relationship.relating is incorrect in the cases #2 and #3: closing parentheses shoud be added before and at the end of the line #3 (otherwise, we cannot know where the mapping of the case #2 continues.

Proposed Solutions/Remarks:
Discussed Solutions:

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==

Decision: Correct parenthesis setting as proposed

Incorporated Solutions:

Mapping path has been changed and correct parentheses have been included.

Issue Reference No.: 293

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-23	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S3	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

definition of the attribute replaced_usage_relationship.usage_context does not specify any restriction about the context

Issue Description:

Presently, the definition of the attribute replaced_usage_relationship.usage_context does not specify any restriction about the context. Is it intended that: - in the case where the context is a process_operation_input_or_output, replaced_usage_relationship.relating = replaced_usage_relationship.usage_context\process_operation_input_or_output.element - in the case where the context is an item_definition_instance_relationship, replaced_usage_relationship.relating = replaced_usage_relationship.usage_context\item_definition_instance_relationship.related - in the case where the context is a product_structure_relationship, replaced_usage_relationship.relating = replaced_usage_relationship.usage_context\product_structure_relationship.related In the mapping_table, - notes 9 and 10 in the mapping-table of replaced_usage_relationship, answer to the 2nd and 3rd questions - Similarly,

the reference path of the process_operation case answers to the answer but this constraint should be made explicit in the definition of the AO replaced_usage_relationship

Proposed Solutions/Remarks:

Translate the constraints defined in the mapping-table in additional normative text in the definition of the AO replaced_usage_relationship.

Discussed Solutions:

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===

in the first case: yes

in the second case: yes

in third case: yes

accepted: add text in the definition of replaced_usage_relationship.context

Incorporated Solutions:

done as proposed.

Issue Reference No.: 294

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-24	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Mapping of item_instance_relationship.related

Issue Description:

As item_instance_relationship.related is an item_instance, I do not understand why the case #3 of the mapping requires "" application_context_element.name='part definition' "". In addition, in the case #2, the reference path does not make explicit which value is expected in application_context_element.name .

Proposed Solutions/Remarks:
Discussed Solutions:

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===

Decision: Move item_instance_relationship from S3 to S7

Incorporated Solutions:

Mapping has been changed to require application_context_element.name='part occurrence'.

Issue Reference No.: 295

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-25	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S3	**Clause:**	

Sentence/abstract/keywords:

problem with replaced_usage_relationship.usage_context when it refers to an
item_definition_instance_relationship

Issue Description:

I have the following problem with replaced_usage_relationship.usage_context when it refers to an
item_definition_instance_relationship: the ARM and the AIM should exclude assembly_component_relationship
and its subtypes from this case because, with the constraint that note 9 brings, the replaced_usage_rel is
equivalent to an assembly_substitute_relationship (which is mapped using
assembly_component_usage_substitute).

Proposed Solutions/Remarks:
Discussed Solutions:

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Clarification:

There is distinct semantics of assembly_substitute_relationship and replaced_usage_relationship.
Replaced_usage_relationship describes a real replacement, i.e. a kind of net change. Assembly_substitute
indicates the possibility to eplace one item by another one.

Decision:

1. Keep mapping of assembly_substitute_relationship to assembly_component_usage_substitute

2. Change mapping of replaced_usage_relationship. Introduce an OR case:

    OR case distinction:

    #1: If no usage_context is given, or usage_context is process_operation_input_or_output

    #2: For the other cases

    OR case mapping:

    #1: (product_definition_relationship)

    #2: (product_definition_substitute)

Incorporated Solutions:

Due to the distinct semantics of assembly_substitute_relationship and replaced_usage_relationship, both concepts
are mapped differently. The mapping of assembly_substitute_relationship to
assembly_component_usage_substitute remains.
For the mapping of replaced_usage_relationship, OR cases have been introduced for the different types of
replaced_usage_relationship.

Issue Reference No.: 296

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-26	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	C1	**Clause:**	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

the fact a SET is used for surface_condition.described_elements is not consistent with similar entities like item_property_association and process_property_association

Issue Description:

The attribute surface_condition.described_element is a set of one to many shaped_element_select. However: - the fact a SET is used is not consistent with similar entities like item_property_association and process_property_association (attributes described_element); - in the AIM, a set of described_element leads to as many instances of property_definition_representation as there are elements in described_element. Therefore, in the ARM and in the AIM, surface_condition.described_element brings inconsistency as it is currently defined.

Proposed Solutions/Remarks:

Remove the SET statement in the definition of the attribute.

Discussed Solutions:

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===
Replace attribute described_element S[1:?] by entity surface_condition_association, pointing to surface_condition and shaped_element_select.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 297

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-27	**Issue status:**	replaced, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S3	**Clause:**	Cl. 4.2 (ARM) ,

Sentence/abstract/keywords:

second sentence of the definition of item_instance is wrong

Issue Description:

The second sentence of the definition of item_instance is wrong as an item_instance could also be referred to by other subtypes of item_definition_instance_relationship (e.g. collection_item_association).

ISO/DIS 10303-214 – Issue log

Proposed Solutions/Remarks:
Discussed Solutions:

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===

not accepted, because collection is no product_structure usage (item instance may only exist, if they are

referenced in an asssembly_relationship and/or in an product_structure_relationship)

replace alternative_solution by product_structure_relationship in the second sentence of the definition of item

instance.

Incorporated Solutions:

Issue Reference No.: 298

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-28	**Issue status:**	rejected, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S3	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

mapping of item_instance is not satisfactory

Issue Description:

The mapping of item_instance is not satisfactory as it involves an error in the use of the IR property_definition.
The mapping of item_instance is based on the simultaneous instanciation of product_definition and a subtype of
product_definition_relationship. In the case of UoF S3, the instance of product_definition is used for the
mapping of item_instance and of its ddid. But in the ARM, item_instance, the subtypes of
item_definition_instance_relationship and product_structure_relationship can be assigned property_values (using
item_property_association). The case where properties are assigned, for example, to an item_instance, to its ddid
and to a next_higher_assembly that refers to the item_instance, cannot be mapped because in the AIM there will
be only two instances where three are needed. Note: in Part 41 Ed2, a property(_definition) assigned to a
product_definition_relationship actually defines a property for the related_product_definition.b

Proposed Solutions/Remarks:

Require the addition of a new entity in Part 41 enabling to characterize a property of a
product_definition_relationship and not of the related_product_definition.

Discussed Solutions:

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===

Rejected.

There is the requirement to assign a property to an instance with no regard to its usage, or dependent on its

usage.

Carification and improvement of the documentation where properties can go, has been done by the solution to issue #362.

Incorporated Solutions:

The issue has been rejected, because there is the requirement to assign a property to an instance both independently, and dependently on its usage.

Carification and improvement of the documentation where properties can go, has been done as part of the solution to issue #362.

Issue Reference No.: 299

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-29	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S3	**Clause:**	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

definition of particular subtypes of item_instance is not useful

Issue Description:

The definition of this particular subtype of item_instance is not useful and increases the complexity of the ARM and of the mapping whereas the entity selected_instance already provides similar information.

Proposed Solutions/Remarks:

Remove Quantified_instance and make the attribute selected_instance.selection_control Optional.

Discussed Solutions:

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==

No, leave it as it is, because of different mapping

In clause 4.2: .selected_range to value_limit or value_range (remove the numerical_value) and add exaple for oil

See #300 for a textual definition of selected_instance.selcted_quantity

Incorporated Solutions:

1) done as proposed.
2) done as proposed.

Issue Reference No.: 300

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-30	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S3	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

definition of the attribute selected_quantity is not satisfactory

Issue Description:

The definition of the attribute selected_quantity is not satisfactory as it is only covers the case of solid parts (see expression ""number of occurrences"").

Proposed Solutions/Remarks:

Replace the expression ""number of occurrences"" by ""quantity of the part, tool or raw material"".

Discussed Solutions:

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==

accepted, replace "number of occurrences of instances " by "quantity of the part, tool, or raw material"

see also #299

Incorporated Solutions:

done as proposed.

Issue Reference No.: 301

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-31	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S3	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

first sentence of the definition of selected_instance is not satisfactory

Issue Description:

The first sentence of the definition is not satisfactory as it mentions only the object Item whereas a selected_instance may be defined by a product_identification.

Proposed Solutions/Remarks:

Keep the word ""item"" but write it in normal characters (i.e. not as reference to the Application Object Item).

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

accepted, use same template as for single_instance or quantified_instance (shall be consistently used fro all item instance subtype and item_instance)

Incorporated Solutions:

done as proposed.

Issue Reference No.: 302

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-32	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

attribute should only be Optional

Issue Description:

The definition of the attribute purpose sounds as a way to provide an additional description for an instance of certification. Therefore, as other similar attributes, the attribute should only be Optional.

Proposed Solutions/Remarks:

Make the attribute Optional.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

make attribute purpose of AO security_classification and certification .... (optional?). See new ARM figures

Incorporated Solutions:

1. certification: done as proposed.

2. security_classification: done as proposed.

Issue Reference No.: 303

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-33	**Issue status:**	Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

cardinality of the inverse relationship is wrong as a document_file cannot have several formats.

Issue Description:

The cardinality of the inverse relationship is wrong as a document_file cannot have several formats.

Proposed Solutions/Remarks:

Specify that a document_file shall be referred to by at most one document_format_property.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Incorporated Solutions:

solved by # 305.

Issue Reference No.: 304

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-34	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

cardinality of the inverse relationship is wrong as the final version of a document_file cannot have been created by several systems

Issue Description:

The cardinality of the inverse relationship is wrong as the final version of a document_file cannot have been created by several systems.

Proposed Solutions/Remarks:

Specify that a document_file shall be referred to by at most one document_creation_property.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

accept all cardinality issues - find a better solution for the ARM representation (change the direction of the relationship)

Incorporated Solutions:

solved by # 305.

Issue Reference No.: 305

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-35	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

cardinality of the inverse relationship is wrong as the text definition of document_content_property makes that assigning several content_property to a document_file has no sense.

Issue Description:

The cardinality of the inverse relationship is wrong as the text definition of document_content_property makes that assigning several content_property to a document_file has no sense.

Proposed Solutions/Remarks:

Specify that a document_file shall be referred to by at most one document_content_property.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Addressed by solution to issue #304

Incorporated Solutions:

Direction of all assertions of this kind inverted.

Issue Reference No.: 306

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-36	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

cardinality of the inverse relationship is wrong as the final version of a document_file cannot have several sizes

Issue Description:

The cardinality of the inverse relationship is wrong as the final version of a document_file cannot have several sizes.

Proposed Solutions/Remarks:

Specify that a document_file shall be referred to by at most one document_size_property.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Addressed by solution to issue #146

Incorporated Solutions:

solved by # 305.

Issue Reference No.: 307

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-37	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

document_file may have several document_source_property objects that refer to it

Issue Description:

A document_file may have several document_source_property objects that refer to it. The meaning of such a case is not clear. Are the sources alternate or do they only provide alternate ways to describe the source_name?

Proposed Solutions/Remarks:

Specify that a document_file shall be referred to by at most one document_source_property.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

change to document_location_property. invert to mandatory set [0:?] to document_location_property. Uniqueness of file_id within the document_represetation and/or (existing) document_location_properties (Change attribute to location_name)

Add two examples for document_location_property.name:

1. http://www.iso.ch/step/a0234.pdf
2. UNIX directory

Aufzeichnungen von Herrn Mohrmann anschauen!!! Auch insbesondere zu dem neuen entity_type alias_file_id (remove document_file from alias select)

Plenary:

======

delete assertion von document_file zu document_location_property

rename alias_file_id to external_file_id

Beim mapping: Siehe Skizze "A"

alternate represetations of the same location, falls mehr als eine document_representation existiert.

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 308

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-38	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

cardinality of the inverse relationship is wrong

Issue Description:

The cardinality of the inverse relationship is wrong as a document_representation cannot have several formats. If the components of a document_representation have different formats, then these formats should be specified at the level of each component.

Proposed Solutions/Remarks:

Specify that a document_representation shall be referred to by at most one document_format_property.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===
see #304

Incorporated Solutions:

solved by # 305.

Issue Reference No.: 309

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-39	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

cardinality of the inverse relationship is wrong

Issue Description:

The cardinality of the inverse relationship is wrong as the final version of a document_representation cannot have been created by several systems. If the components of a document_representation have different creating systems, then these systems should be specified at the level of each component.

Proposed Solutions/Remarks:

Specify that a document_representation shall be referred to by at most one document_creation_property.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==
see #304

Incorporated Solutions:

solved by # 305.

Issue Reference No.: 310

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-40	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

cardinality of the inverse relationship is wrong

Issue Description:

The cardinality of the inverse relationship is wrong as the way document_content_property is defined makes that assigning several content_property to a document_representation has no sense. If the components of a document_representation have different contents, then these contents should be specified at the level of each component.

Proposed Solutions/Remarks:

Specify that a document_representation shall be referred to by at most one document_content_property.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==
see #304

Incorporated Solutions:

done as proposed (see #305)

Issue Reference No.: 311

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-41	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

cardinality of the inverse relationship is wrong

Issue Description:

The cardinality of the inverse relationship is wrong as the final version of a document_representation cannot have several sizes. If the components of a document_representation have different sizes, then these sizes should be specified at the level of each component.

Proposed Solutions/Remarks:

Specify that a document_representation shall be referred to by at most one document_size_property.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

see #304

Incorporated Solutions:

solved by # 305.

Issue Reference No.: 312

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-42	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_H
Sentence/abstract/keywords:			

document_representation may have several document_source_property objects that refer to it

Issue Description:

A document_representation may have several document_source_property objects that refer to it. The meaning of such a case is not clear. Are the sources alternate or do they only provide alternate ways to describe the source_name?

Proposed Solutions/Remarks:

Specify that a document_representation shall be referred to by at most one document_source_property.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

solved by #307. It contains alternate representations of the same location

Incorporated Solutions:

no further action required. (see #305)

Issue Reference No.: 313

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-43	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

attribute real_world_scale should not be of type value_with_unit

Issue Description:

The attribute real_world_scale should not be of type value_with_unit as it would be senseless to specify it as a value_limit or a value_range.

Proposed Solutions/Remarks:

Change the type of the attribute real_world_scale to the type nominal_value or even as a simple REAL (in the ARM). Note: in the AIM, only ratio_unit should be allowed for the scale.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Resolution: change it to be nominal_value (new: numerical_value)

Incorporated Solutions:

done as proposed.

Issue Reference No.: 314

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-44	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

attribute referenced_standard should refer to a classification_system

Issue Description:

The attribute referenced_standard should refer to a classification_system in order to enable to improve the precision of the specification of the used standard and to enable to refer to company standards.

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

acceted, add optioinal reference classification_system, in mapping use addtitional applied classificaition system

assignment to assign it to the rep item of mappinng target of referencesd standard

change attribute size_format to size

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 315

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-45	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S6	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

predefined value of classification_type

Issue Description:

In the same manner, the value ""assembly"" is a predefined value of classification_type, the value ""collection"" should be predefined and reserved to items that have at least a collection_definition. Note: the values ""assembly"" and ""collection"" should be exclusive.

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

'collection': This type of classification shall be used for any Item that has an Collection_definition provided for at least one of its versions.

The constraint is not in accordance to the ARM (no ONEOF) -> rejected

Incorporated Solutions:

Added 'collection'.

Issue Reference No.: 316

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-46	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

document specific properties have, almost all, no sense for a physical_model

Issue Description:

As a physical_model has a different nature from the other kinds of document_representation, the document specific properties have, almost all, no sense for a physical_model (e.g. document_format_property).

Proposed Solutions/Remarks:

Exclude physical_model from document_property_select, on a general basis (preferred solution) or consider each property and determine if its textual definition fits the physical_model case.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

accepted, exclude size, format, and creation property in clause 4.2 of phsical_document

Incorporated Solutions:

done as proposed.

Issue Reference No.: 317

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-47	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S8	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Change of process_operation_resource_assignment.operation

Issue Description:

The input and output elements of a process_operation are given in the context of a process_plan. Therefore, process_operation_input_or_output.operation refers to process_plan_operation_assignment. For similar reasons, the resources of an operation should be given in the context of the process_plan where this operation is used. Therefore, process_operation_resource_assignment.operation should refer to process_plan_operation_assignment and not to process_operation.

Proposed Solutions/Remarks:

Change process_operation_resource_assignment.operation to refer to process_operation.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

See solution of #270.

Incorporated Solutions:

no further action required.

Issue Reference No.: 318

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-48	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Document_type_property.is_applied_to should not be assigned at the level of a representation

Issue Description:

A Document_type_property.is_applied_to may refer to a Document_representation. But, this type information should not be assigned at the level of a representation but at the level of the Document its self (similarly, specific_item_classification is assigned to an item and not to ddid). For example, the fact that a document contains a check plan (""check plan"" is one of the predefined values), is true whatever the representation of the document is.

Proposed Solutions/Remarks:

Enable to assign a document_type_property to a Document. Remove the posssibility to assign a document_type_property to a document_representation.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

already resolved by ...

Incorporated Solutions:

solved by # 143.

Issue Reference No.: 319

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-49	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

capability to assign a document_type_property to a Document_representation seems redundant

Issue Description:

The capability to assign a document_type_property to a Document_representation seems redundant with (or included in) the capability to assign a general_classification to this entity type. In addition, the document_type should be specified at the level of the document.

Proposed Solutions/Remarks:

Remove the capability to assign a document_type_property to a document_representation.

ISO/DIS 10303-214 – Issue log

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Addressed by solution to issue #143

Incorporated Solutions:

solved by # 143.

Issue Reference No.: 320

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-50	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

definition of the inherited attribute version_id is ambiguous

Issue Description:

The definition of the inherited attribute version_id is ambiguous: does it identify the version of the function or the version of the definition of the function in the relevant contexts.

Proposed Solutions/Remarks:

Add the objects Functionality and function_version (as defined in AP212) (then, the version of the function would be clearly identified by the object function_version. (Note: this proposal is consistent with what exists already in the AIM)

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

would impact major ARM changes

in favour: FRA

against: JPN; SWE, GER

try to clarify in the Mapping

no ARM change, clarification of definition, clarification of mapping

Incorporated Solutions:

see # 321

Issue Reference No.: 321

Originator:	P. Huau,GOSET,pascalhuau@csi.com	Date:	
Country No.:	FRA-51	Issue status:	accepted, Closed
Urgency:	major	Type:	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	
Related Part/UoF:	S7	Clause:	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

definition of the inherited attribute version_id is ambiguous

Issue Description:

The definition of the inherited attribute version_id is ambiguous: does it identify the version of the component or the version of the definition of the component in the relevant contexts. Adding objects similar to the objects Functionality and function_version (as defined in AP212),i.e. Organ and product_component_version, would remove this ambiguity as then, the version of the organ/component would be clearly identified by the object product_component_version

Proposed Solutions/Remarks:

Add objects similar to the objects Functionality and function_version (as defined in AP212). Alternate proposal: clarify the exact meaning of the attribute version_id in product_component.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
===
Addressed by solution to issue #320

Incorporated Solutions:

Mapping of product_component has been changed to product_definition_formation to reflect the version character of the object, the version_id attribute therefore maps to the product_definition_formation.id.

Issue Reference No.: 322

Originator:	P. Huau,GOSET,pascalhuau@csi.com	Date:	
Country No.:	FRA-52	Issue status:	accepted, Closed
Urgency:	minor	Type:	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	
Related Part/UoF:	S3	Clause:	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

assembly_definition.assembly_type attribute should be made Optional

Issue Description:

As there are no predefined values for the assembly_type and as validation examples show that this attribute has often to be left empty, this attribute should be made Optional.

Proposed Solutions/Remarks:

Make the attribute optional

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

accepted

Incorporated Solutions:

solved by # 106.

Issue Reference No.: 323

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-53	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

collection_definition.purpose attribute should be made Optional.

Issue Description:

As there are no predefined values for the purpose and as validation examples show that this attribute has often to be left empty, this attribute should be made Optional.

Proposed Solutions/Remarks:

Make the attribute optional

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

attribute already optional

Incorporated Solutions:

no action required.

Issue Reference No.: 324

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-54	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) , Clause_5.2.1

Sentence/abstract/keywords:

Mapping of physical_instance.

Issue Description:

This object is mapped as a product_definition. It is not clear if the product, indirectly referred to by this product_definition, has to be or shall not be the same as the product indirectly referred to by the product_definition that maps the ddid that is referred to by the attribute is_realization_of of the physical_instance.

Proposed Solutions/Remarks:

As a physical_instance has a different life-cycle as its corresponding item, the mapping should specify that both product_definitions refer to different products.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision: Improve mapping to reflect that item_instance and physical_instance map to different products:

1. Include mapping rule requiring product with product_context 'physically realized product'

2. Map serial_number to product.id

3. Map lot_id, inventory_number to identification_assignments referencing product

Incorporated Solutions:

1) mapping rule included requiring product with product_context 'physically realized product'

2. serial_number mapped to product.id

3. lot_id, inventory_number mapped to identification_assignments referencing product

---

Issue Reference No.: 325

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-55	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S5	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

Simultaneous_activity, simultaneous_process_operation to be replaced by instances of activity_relationship

Issue Description:

For harmonization with AP212, this object should be deleted and replaced by instances of activity_relationship with relation_type='simultaneity'. Note1: the set of simultaneous activities can be derived from the instances of activity_relationship. Then, for internal consistency, simultaneous_process_operation should be deleted and replaced by instances of process_operation_relationship with relation_type='simultaneity'

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Addressed by solution on issue #119

ISO/DIS 10303-214 – Issue log

Incorporated Solutions:

ARM and mapping changed as proposed. Simultaneous activities reflected by action_relationships with action_relationship.name = 'simultaneity'. See issue #119.

Issue Reference No.: 326

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-56	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

attribute ordered_price should be replaced by an attribute .description

Issue Description:

As contract.ordered_price is mapped in a text attribute and for consistency with AP212, the attribute ordered_price should be replaced by an attribute .description.

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

accepted

Incorporated Solutions:

done as proposed.

Issue Reference No.: 327

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-57	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

type of role attribute of organization_in_contract

Issue Description:

We cannot understand why role_of_organization is the only role attribute of type string_select.

Proposed Solutions/Remarks:

For internal consistency, change its type and define it as the other attributes role.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

accepted, change to permissive list with the values: contractor, contractee and provide definitions

Incorporated Solutions:

done as proposed.

Issue Reference No.: 328

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-58	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

named_size as a subtype of rectangular_size

Issue Description:

For consistency with AP212 and because, specifying a name for a format is often not sufficient for the receiver of this information to know exactly the dimensions of a sheet (e.g. a european worker does usually not know what are the dimensions of a sheet in US Letter format), named_size should become a subtype of rectangular_size. In addition, the definition should say that the dimensions specified within size_in_x and size_in_y have precedence on the information specified in size_format.

Proposed Solutions/Remarks:

Make named_size a subtype of rectangular_size Insert the statement about the precedence of explicit dimensions

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

accepted (same as AP212)

Incorporated Solutions:

done as proposed.

Issue Reference No.: 329

ISO/DIS 10303-214 – Issue log

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-59	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Document_content_property, String_with_language: The way a language is specified is not the same

Issue Description:

The way a language is specified is not the same in both entities (two attributes versus one).

Proposed Solutions/Remarks:

Either, create an entity type Language having the attributes language and country_code, as presently defined in string_with_language, and refer to this entity in string_with_language and document_content_property.languages Or, merge the attribute language and country_code in one attribute in string_with_language and use the resulting text definition in the definition of document_content_property.languages.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

see GER-114

Incorporated Solutions:

solved by # 114.

Issue Reference No.: 330

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-60	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

one of the two mapping cases proposed for item_version is unclear

Issue Description:

Two mapping cases are proposed but the second one is unclear: what does ""when the source is known"" refer to? Which information, defined in the ARM, enables to decide whether the source is known.

Proposed Solutions/Remarks:

Document which information enables to decide whether the source is known or remove the mapping case #2 (preferred solution).

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Discussion:

The OR case mapping is for AP203 interoperability reasons. OR case #2 is a hint for a postprocessor how to deal with product_definition_formation_with_specified_source.

Decision: Improve mapping table and documentation

1. change mapping:

item_version | pdf | 41 | | product_definition_formation

#1: (|pdf|)

#2:({pdf =>

pdf_with_specsource})

2. Clarify necessity to document OR case #1 with rspect to the proposals for OR case documentation (complete coverage)

3. Find suitable definition for #2: e.g. "if data with additional source are generated or required", "if compatibility to AP203 is required".

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 331

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-61	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	G_1-8	**Clause:**	Cl. 4.1 (UoFs) , Clause_6
Sentence/abstract/keywords:			

Hybrid_geometric_model_3d in UoFs not adequately assigned

Issue Description:

This application object is included in UOFs G1 to G7. But this inclusion has no sense in the UOFs that specify restrictions on the kind of geometry: e.g. G2 is restricted to wireframe whereas an hybrid_geometric_model_3d is intended to contain any kind of 3D geometry.

Proposed Solutions/Remarks:

Create a UOF specific for hybrid_geometric_model_3d (preferred solution) or remove it from the UOFs where it has no sense (i.e. G2, G3, G4, G5, G7)

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Create a new UoF G9 "hybrid_model" containing hybrid_model_3d. Include G9 in all CCs geometry is contained

in.

France will make a proposal for definition in clause 4.2.

Incorporated Solutions:

based on UK issue, the object was moved to UoF S2. Definition of UoF was updated accordingly.

Issue Reference No.: 332

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-62	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S6	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

modeling of the object Classification_attribute is not satisfactory

Issue Description:

The modeling of the object is not satisfactory as regards the attributes Id and Name. These attributes appear redundant with the attributes property_value.name, property_value.definition.property_type and property_value.definition.id (at least the examples provided are quite similar). The example provided with the definition of the AO general_classification (based on ISO 1207) clearly shows that the classification_attributes are in fact property values. In this example, the description of the classification attribute *12 is 'nominal length'. A classification_attribute is no more than a property_value that is used for classification purposes In addition, it is unclear what could be a classification_attribute without attribute_value.

Proposed Solutions/Remarks:

Replace the AO classification_attribute by the AO property_value in general_classification.attribute and delete the application object classification_attribute.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

adopt mapping for classification_attribute to use the general_property in the reference path

improve definition of classification_attribute

rename the atribute attribute_value as allowed_values

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 333

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-63	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S6	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

right attributes should be assigned in the example

Issue Description:

The example provided with the definition of the AO general_classification (based on ISO 1207) clearly shows that the classification_attributes are in fact property values. In the example dealing with the general_classification *2, the description of the classification attribute *12 is proposed to be 'nominal length'. This text could be and should be dealt with as a value_determination and a property type information and not as a descriptive text. In addition, the value *12 should be dealt with as property_value.name (see examples in the AP for property_value.name) (same remark for attributes *11 and *13)

Proposed Solutions/Remarks:

In the example, assign the right attributes in the example,i.e. value_determination and property_value.definition.property_type.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

accepted, add in the example for *12 possibly to general_property with property_type ="length" and *12 refering to a property_value_representation with qualifier="nominal" and definition refering to the same general_property with property_type="length" (same as above)

Incorporated Solutions:

done as proposed.

Issue Reference No.: 334

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-64	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

Definition of item_version should be completed concerning /NULL value

Issue Description:

The PDM schema rel 2.1 specifies that when a system does not support the concept of version of item, it should instantiate item_version.id and product_definition_formation.id with the value '/NULL'. This statement should be reflected in the standard.

Proposed Solutions/Remarks:

Add the definition of item_version.id that the value '/NULL' shall be used to indicate that the concept of version does not exist in the system and that instances of item_version are only used to relate instances of item and of ddid.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

partially accepted/rejected. Too specific

include clause 2 of recom. pract of AP214 into Annex D (implementation specific requ.) of AP214

Incorporated Solutions:

Done as proposed

Issue Reference No.: 335

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-65	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

specific_item_classification badly modeled

Issue Description:

This object is badly modeled as there is no way to structure the various spec_item_classif. The PDM schema promotes the idea that the category 'part' may be decomposed into the sub categories 'detail' and 'assembly'. It is not possible to reflect such a structure with the current modeling of specific_item_classification.

Proposed Solutions/Remarks:

Replace specific_item_classification by general_classification/classification_association (preferred solution) or remodel it so that it is possible to relate two specific_item_classifications.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

solved by resolution of issue #140

Incorporated Solutions:

see # 140

Issue Reference No.: 336

Originator:	P. Huau,GOSET,pascalhuau@csi.com	Date:	
Country No.:	FRA-66	Issue status:	accepted, Closed
Urgency:	major	Type:	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	
Related Part/UoF:	S6	Clause:	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

Classification_association: change of definition

Issue Description:

The definition of the attribute definitional states that it shall be instantiated for a material, an item or a catalogue_thread. I disagree with the fact that it be instantiated for an item because this attribute addresses the definition of an item. Therefore, it should be used when classification_association is associated with a definition of an item, i.e. with a ddid. Notes: - in addition, the classification_association might not be relevant in all application_contexts nor in all versions of the item; - the objet item_property_association has also an attribute definitional and this object can refer to a ddid and not to an item.

Proposed Solutions/Remarks:

Replace the word 'item' by the word 'design_discipline_item_definition'.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

accepted, but leave item and add item_version and ddid to the definition

Incorporated Solutions:

done as proposed.

Issue Reference No.: 337

Originator:	P. Huau,GOSET,pascalhuau@csi.com	Date:	
Country No.:	FRA-67	Issue status:	accepted, Closed
Urgency:	major	Type:	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	
Related Part/UoF:	S6	Clause:	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

Classification_association: not clear what the consequences of a value True for definitional are

Issue Description:

It is not clear what the consequences of a value True for definitional are. The definition states that the general_classification serves as a definition. Does it mean that the classification_attributes take precedence on any property_value assigned to the classification_association.classified_element?

Proposed Solutions/Remarks:

Rewrite the definition of the attribute definitional in order to state that: - even if definitional=true, the associated_classification does not take precedence on the descriptions of the classified_element made using

property_values or geometric_models. - if definitional=true and if the classified_element is an item (or rather a ddid - see issue #68), then the associated_classification shall not be considered as sufficient to represent the item and that the actual definition of the item shall be given in one or more instances of ddid (in other words, classification_association cannot be used as a way to define a part and its shape instantiating a parametric part defined in some library).

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
==
1. ok, accepted, no precedence apply
2. add the explanation: it would be only sufficient, if in addition to the definitional classification_assoc. a definitional_property_assoc. and an item shape associated to it (e.g representaed by some external model with parameters)

Incorporated Solutions:

done as proposed.

Issue Reference No.: 338

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-68	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S4	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

effectivity_assignment: it is not possible to specify when replacement has become effective

Issue Description:

The object organization_relationship enables to represent the fact that an organization has replaced another, with respect to some product data. But it is not possible to specify when this replacement has become effective.

Proposed Solutions/Remarks:

Add organization_relationship in the SELECT type effective_element_select

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
==
accepted, but introduce organization_relationship into general org_data_select and add a note to the value successor of relation_type of AO organization_relationshipthat an additional dat-assignment may be applied to that org_relationship

Incorporated Solutions:

Added note to organization_relationship.

Issue Reference No.: 339

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-69	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) , Annex_G

Sentence/abstract/keywords:

Information on successor of a person needed.

Issue Description:

AP214 enables to specify who is the owner or the creator of product data. In the case where this person leaves his company, it is needed to be able to specify the name of his successor. But the ARM currently does not enable to provide this information.

Proposed Solutions/Remarks:

Add person_in_organization_relationship. In order to specify the effectivity of this relationship, add the new object in the SELECT type effective_element_select. NB: a corresponding issue is simultaneously raised against ISO 10303-41 in order to get a resource entity that enables to relate two persons.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
===
add person_in_organization_relationship (new AO with attributes relating, related, and relation_type) and add this AO to general_organization_data_select (the an date kann be assigne when this relationship will be established.

Solution in AIM depents on the Part41 issue (use person in person assignment to express this relationship, use successor as role name)

Incorporated Solutions:

done as proposed.
Added relation_type 'successor'.

Issue Reference No.: 340

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-70	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	G1	**Clause:**	Cl. 5.1 (Mapping tables) ,

Sentence/abstract/keywords:

geometric_model: The reference path of both the application object and its attribute version_id are partly inconsistent, redundant and wrong

Issue Description:

The reference path of both the application object and its attribute version_id are partly inconsistent, redundant and wrong. E.g. shape_representation should not be specified as a case of identification_item (in the 1st ref. path).

Proposed Solutions/Remarks:

Write only one correct reference path for the mapping of the version_id

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Remove mapping rule in the mapping path.

Incorporated Solutions:

No change in the mapping, since the

mapping for geometric_model_version

with the mapping rule in the reference path

is

1. correct for a destinction of the mapping

   of geometric_model

2. consistent with the reference path for the

   attribute version_id

3. consistent with the mapping of other cases,

   e.g. styled_model_version

Issue Reference No.: 341

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-71	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

external_model: The mapping of is_defined_as is not satisfactory

Issue Description:

The mapping of is_defined_as is not satisfactory as it leads to have an instance of representation without items (External_model is mapped as a representation). Such an empty representation violates the definition of the entity in Part 43

Proposed Solutions/Remarks:

Require (and document in clause 4.2) for external_geometric_model and external_picture that the associated (external) representation contains always an axis2_placement. NB: the axis2_placement in the representation might then be used when creating mapped_items with this representation.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Decision:

1. Add Note in ARM 4.2

2. Add mapping rule in mapping of external_model:

        rerpresentation.items[1] ->

         (axis2_placement_2d)

         (axis2_placement_3d)

3. As geometric_model has changed from (ABS) to non abstract. The above decision should also be applied for the use of non abstract geometric_model.

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 342

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-72	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

string_with_language: Inverse constraint should constraint

Issue Description:

In order to avoid lonesome instances of string_with_language not belonging to any multi_language_string, an Inverse constraint should constraint the cardinality of the relationship from string_with_language to multi_language_string to be at least 1.

Proposed Solutions/Remarks:

Add an Inverse attribute as described above (S[1:?])

Discussed Solutions:

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==

accepted

Incorporated Solutions:

done as proposed.

Issue Reference No.: 343

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-73	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S3	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

item_instance_relationship: mapping is not satisfactory

Issue Description:

The documentation of the mapping of item_instance_relationship is not satisfactory as it is not clear whether the 4 options are exclusive nor when they apply. First, the mapping is presented for UOF S3 but option 4 mentions ""if used with UOF S7"": what does this mention means? In addition, the subtype general_item_instance_relationship has only a mapping for UOF S7.

Proposed Solutions/Remarks:

As, in fact, the mapping actually depends on the conformance class that will be used, Replace the texts 'if used with UOF Sx"" by ""when used in a conformance class that includes UOF S7""

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
===
Addressed by solution on issue #294 (move of item_instance_relationship from S3 to S7)

Incorporated Solutions:

item_instance_relationship has been moved to UoF S7. OR case documentation has been improved.

Issue Reference No.: 344

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-74	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

document_assignment: approach taken in the AIM raise several issues

Issue Description:

The mapping_table and the AIM use the entity document_product_equivalence that specifies that a document or a document_version shall actually be considered as a product ('document as product' approach). However, this

approach taken in the AIM raise several issues: 1- the fact that documents are actually considered as equivalent to products is not documented in clause 4.2. 2- in the case where assigned_document refers to a document_representation, the reference path does not make explicit the fact the product_definition shall indirectly refer to a product of category ""document"".

Proposed Solutions/Remarks:

1- document, in clause 4.1 or 4.2, the fact that documents are actually considered as equivalent to products (in order to justify the use of document_product_equivalence in the AIM) 2- in the case where assigned_document refers to a document_representation, make explicit in the reference path, the fact the product_definition shall indirectly refer to a product of category ""document"".

Discussed Solutions:

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==

1. product is not an ARM term, therefore the clause 5.2.1.x (fundamental assumptions) should give some clarification of the document as product approach. Add subclause. Add note in E1 (clause 4.1) see clause 5.2.1.x for a discussion of how the info req. of the E1 Uof are satisfied.

2. include end of mapping path of application assertion from document_assignment to document_version in the mapping of the application asssertion document assignment to document_representation

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 345

Originator:	P. Huau,GOSET,pascalhuau@csi.com	Date:	
Country No.:	FRA-75	Issue status:	accepted, Closed
Urgency:	major	Type:	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	
Related Part/UoF:	E1	Clause:	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

document_assignment: dummy document should be avoided

Issue Description:

The mapping_table and the AIM use the entity document_product_equivalence that specifies that a document or a document_version or a document_representation shall actually be considered as a product ('document as product' approach). This approach involves that an intermediate dummy document is created. This dummy document has for kind ""configuration controlled document"" or ""configuration controlled document version"" or ""configuration controlled document definition"". But in fact, this instance document is a dbummy document needed to be able to use document_reference. Actually, it may only contain data about itself, i.e. about a document.

Proposed Solutions/Remarks:

As assigning document_kind as no sense here, requires document.kind to be an optional attribute in Part 41 and keeps this attribute empty in the above cases.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Decision:

The solution is pending on Part41 solution.

Some countries raised concern to change the 'document as product approach' as there is lot of legacy data out using this approach. The PDM Schema Usage Guide is based on this approach, too.

Incorporated Solutions:

not incorporated, since rejected: comaptibility with PDM schema and PDM schema usage guide important

Issue Reference No.: 346

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-76	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S4	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

effectivity_assignment: It is unclear whether a product datum that has no effectivity assigned for a given date is effective or not

Issue Description:

It is unclear whether a product datum that has no effectivity assigned for a given date is effective or not. E.g.: let's consider an instance of next_higher_assembly 1- Assume this instance is associated with an effectivity from 01/01/99 to 30/07/99 with effectivity_assignment.role=""planned period"" At the date when we read this issue, if no other effectivity is assigned to the nha, is this nha effective or not? (My opinion is that it is unknown, the more as the role being ""planned period"", it is uncertain that the nha has actually been effective) 2- Assume this instance is associated with an effectivity from 01/01/99 to 30/07/99 with effectivity_assignment.role=""actual period"" At the date when we read this issue, if no other effectivity is assigned to the nha, is this nha effective or not? (the nha has been effective, but now, ???)

Proposed Solutions/Remarks:

Specify in clause 4.2, that outside the effectivity intervals assigned to a product datum, its effectivity is unknown. (see also issue GALIA-77)

Discussed Solutions:

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===

to be discussed in plenary (but propably ok)

Plenary: accepted

Incorporated Solutions:

see # 273.

Issue Reference No.: 347

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-77	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S4	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

effectivity_assignment: there is no explicit way to specify that a product datum is not effective

Issue Description:

Effectivity_assignment enables to specify an interval of effectivity for a product datum. But, there is no explicit way to specify that a product datum is not effective, i.e. it shall not be used during a interval of time (whereas, for approvals, it is possible to specify that a product datum is disapproved).

Proposed Solutions/Remarks:

1 - (preferred solution) Add a boolean attribute in effectivity_assignment indicating whether the assignment defines an effectivity_period or an ineffectivity period. 2 - (alternate solution) Complete the list of predefined roles and propose values that enable to specify ineffectivity intervals.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

add role1 (actual, planned, required)

add boolean attribute effective : BOOLEAN;

Addition in clause 4.1, that propagation of effectivity_information, approval_information, etc. is not implicitly available.

Incorporated Solutions:

1) PL for role changed to exclusive the values 'actual', 'planned', 'required'

2) done as proposed, boolean attribute added.

3) Added text to cl. 4.1 in section for S4.

Issue Reference No.: 348

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-78	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S3	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

item_instance: expression should be replaced

Issue Description:

The second sentence of the definition, i.e. ""an item_instance shall be used ..."" should be enhanced as the expression ""as an alternative solution"" is not appropriate.

Proposed Solutions/Remarks:

Replace the expression by ""as an element of the realization of an alternative_solution"".

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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replace Alternative_solution with product_structure_relationship
See #297

Incorporated Solutions:

solved by # 297.

Issue Reference No.: 349

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-79	**Issue status:**	Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S3	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

WOrd misspelled.

Issue Description:

The rule WR1 contains the word ""instamce"" instead of ""instance"".

Proposed Solutions/Remarks:

Correct the word

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Incorporated Solutions:

Rule has been corrected as proposed.

Issue Reference No.: 350

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-80	**Issue status:**	Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Clause_5.2
Sentence/abstract/keywords:			

item: constraint has no corresponding constraint in the AIM

Issue Description:

The definition of the attribute id of the AO item contains the sentence: "" For the id, an owner shall be specified by a Person_organization_assignment with role 'id owner'."" This constraint has no corresponding constraint in the AIM.

Proposed Solutions/Remarks:

Add the missing rule in the AIM (i.e. enforce that exactly one instance of applied_person_organization_assignment refers to the instance of product with role=id owner).

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
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Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 351

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-81	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

item_version: mapping case unclear.

Issue Description:

The mapping of the object item_version contains a case ""#2: if the source is known"". But it is not clear where in the ARM such an information has to be fetched. Does case 2 correspond to a case where the id owner of the associated item does not belong to the current organization? Does case 2 correspond to a case where the item_version plays the role of related in a item_version_relationship whose relation_type would be ""supplied

part""? Note: the PDM schema usage guide recommends not to use product_definition_formation_with_specified_source.

Proposed Solutions/Remarks:

As case 2 is unclear and as using product_definition_formation_with_specified_source does not provide valuable further information by itself, remove the mapping case #2.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Addressed by solution to issue #330

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 352

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-82	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

physical_instance: useless portion of the reference path

Issue Description:

The following portion of the reference path of the mapping of physical_instance is useless:
[name_attribute_select = product_definition name_attribute_select <- name_attribute.named_item name_attribute name_attribute.attribute_value = 'physical instance'] because the required value (application_context_element.name = 'physical occurrence') for the product_definition.frame_of_reference is sufficient to distinguish between a part definition and a physical instance

Proposed Solutions/Remarks:

Remove the useless portion of the reference path.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Decision: Remove mapping rule as proposed.

Incorporated Solutions:

Unnecessary portion of reference path was removed.

Issue Reference No.: 353

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-83	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

physical_instance: mapping of serial number

Issue Description:

The AO physical_instance is mapped as a subtype of product_definition. However, this mapping does not provide information about what information is expected in the instances product_definition_formation, and indirectly of product, that are referred to by this product_definition. As in Part 41 edition 2, the entity product is to be used to identify also a physical object (e.g. SS Titanic), the product_definition should refer to an instance of product that identifies/corresponds to the physical object. Therefore, as serial_number and lot_id provide identification for a physical object and not for a definition view of a physical object, serial_number should serve to populate the attribute id of the instance of product.

Proposed Solutions/Remarks:

In any case, document which information is expected in product_definition_formation and in product (and also in product_related_product_category (because of the rule product_requires_category)). Change the mapping of serial_number (should be mapped as product.id)

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
===
Addressed by solution on issue #324

Incorporated Solutions:

Mapping was changed (see solution to issue #324).

Issue Reference No.: 354

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-84	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Clarification in textual definition needed.

Issue Description:

The approach taken in AP214 with document_representation is to consider documents similarly as products (see for example the mapping). As AP214 distinguishes between items and physical_instances, AP214 should also

distinguish between definitions of documents and actual realizations of documents. Example: ISO 10303-11:1994 is a document (in fact the identification of the definition of a document). The identification of a Word Perfect representation of this document is a digital_document. The file .wpd that contains the actual text of ISO 10303-11:1994 is a digital_file. The copy I have bought to ISO is a hardcopy. But this copy does not belong to a particular physical_document; it is only a particular paper realization of a digital_document. If we consider that digital_document and physical_document identify a definition of a document (and not an actual representation), then the current links between digital_document and digital_file and between physical_document and hardcopy are not satisfactory and we need to introduce a mechanism similar to the one enabling to describe the content of a physical_instance and to relate it to its definition.

Proposed Solutions/Remarks:

In any case, clarify in the text definition of physical_document and of digital_document whether an instance of one of these entities identifies a definition of a document or an actual realization of a document. Replace the attribute digital_document.file by an attribute (optional) digital_file.is_realization_of referring to digital_document (similar to the attribute physical_instance.is_realization_of) Replace the attribute physical_document.file by an attribute (optional) hardcopy.is_realization_of referring to physical_document (similar to the attribute physical_instance.is_realization_of) NB: the description of the actual structure of an actual digital or physical_file shall be made using document_file_relationship.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99
===
better textual definition with examples (clarification) needed in order to be able to distinguish between the usage of the different concepts (digital_document, digital_file) and the relationships between these concepts.
further discussion in P2
addtion: recommended practices to AP214 may be an addition
reference: html-link is an example
derivation: add better example, abstract of a document, means not necessarily automatic derivation (this is covered by the value translation)
add the docuemnt file relationsship, the follwowing values are only permissible, if the relating or related document file is not included in any document representation: addition, decomposition, peer.
digital_document.file: computer interpretable realization of the digital document
physical_document.component: physical realization of the physical document

Incorporated Solutions:

-added 'addition', 'reference', 'derivation' in Example for document_file_relationship.
-added statement regarding their usage.
-improved definitions of digital_document_file and physical_document_component as proposed.

Issue Reference No.: 355

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-85	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S4	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

product_class: mapping unclear

Issue Description:

The mapping of the AO product_class in the case of UOF S4 contains 3 main cases. Whereas the first two cases are clearly specified and separated, the third one is at least ambiguous or senseless. In this case, i.e. if the product_class is associated with a product_component or a product_function, the mapping requires the instanciation of the entity data types product_class and configuration_item. BUT: 1- product_component, product_function and class_structure_relationship have no mapping in the case of UOF S4 2- it is quite unclear why and when the fact that a product_class is associated with a product_function or a product_component implies that a configuration_item (as configuration_item corresponds in the ARM to product_identification)

Proposed Solutions/Remarks:

Remove the third mapping case (or) Explicit in the mapping table (reference path) the relationship with the product_component or with the product_function AND document this case in the clause Fundamental concepts and Assumptions (5.2.1)

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Decision:

Remove OR case #3 as proposed

Incorporated Solutions:

OR case has been removed from mapping as proposed.

Issue Reference No.: 356

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-86	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

mapping does not conform to the semantics of entity in Part 44

Issue Description:

The object is mapped onto the entity data type configuration_design. But this mapping does not conform to the semantics of the entity in Part 44 (implementation of a configuration_item) in the following cases: - case where the related object is a product_function and where the relation_type is 'functionality' (since the relationship

indicates that the product_class contains a given functionality and not that the product_function implements the product_class; - case where class_structure_relationship.relation_type is not one of the two predefined cases (since it cannot be considered that the related implements the product_class)

Proposed Solutions/Remarks:

Map the AO product_function as a subtype of configuration_item when it is related to a product_class. Map the AO product_component as a subtype of configuration_item when it is related to a product_class.

Discussed Solutions:

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Decision: Improve mapping for class_structure_relationship:

1. Map to an AND case: [configuration_item] [configuration_design]

2. Include mapping rule: (configuration_item.name='functionaL structure item')

(configuration_item.name='conceptual structure item')

Incorporated Solutions:

1) mapping to configuration_design was kept as it has mandatory reference to configuration_item and AND mapping is therefore not necessary.

2) mapping rule has been included to restrict the name of this configuration_item to 'functionaL structure item' or 'conceptual structure item'

Issue Reference No.: 357

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-87	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S7	**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			

specified_item: Usage of attribute unclear.

Issue Description:

The attribute specified_instance.assembly_context is optional. It is not clear when this attribute must be present or can be left without value, and ,what is the assembly context when the attribute is not populated. Looking at the AIM, it seems that the assembly_context is always the assembly_definition that is referred to as upper_usage.definition.

Proposed Solutions/Remarks:

Remove the attribute assembly_context or document what is the assembly context when the attribute is not populated.

Discussed Solutions:

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the attribute need not be populated, because it can be derived (especially in th enon-recusive case). In the recusive case this attribute shall be allways present.

In accordance to the AIM, it will be made mandatory. (not longer optional)

Incorporated Solutions:

done as proposed.

Issue Reference No.: 358

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-88	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	PR1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Inconsistency between ARM and AIM

Issue Description:

The fact that the attribute material.described_element is not an aggregate involves that, for a given material, as many instances of the AO material have to be created as there are described elements (useless duplication). On the other hand, material.described_element is mapped onto material_designation.definitions that is a SET. Therefore the ARM attribute could be updated to be consistent with the AIM attribute.

Proposed Solutions/Remarks:

Make material.described_element a SET[1:?].

Discussed Solutions:

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accepted

Incorporated Solutions:

done as proposted.

Issue Reference No.: 359

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-89	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

document_type_property: redundant appearance

Issue Description:

The object document_type_property appears as redundant with the object general_classification (attributes quite similar). In addition, this object is included in the Select type classified_item_select, i.e. a general_classification might be associated with a document_type_property which would then represent a kind of classification of a classification (of document).

Proposed Solutions/Remarks:

Remove the object document_type_property. Replace the functionality it provided by the functionality provided by classification_association.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Addressed by solution to issue #143

Incorporated Solutions:

solved by # 143.

Issue Reference No.: 360

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-90	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	E1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

document_source_property: mapping not satisfactory

Issue Description:

The mapping of document_source_property (onto applied_external_identification_asignment) is not satisfactory as the inherited attribute assigned_id gets no value.

Proposed Solutions/Remarks:

Map document_source_property onto applied_identification_assignment with: - source_name mapped onto assigned_id - applied_identification_assignment.role.name= 'document source' (or 'reference path')

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Discusion:

The proposal was rejected for interoperability reasons

(applied_external_identification_assignment/external_source are used in AP203, PDM-IF and CAx-IF

implementations).

The proposed solution for issue #307 (ARM changes: renaming of document_source_property to

document_location_property which gives the location only, file_name given by document_file.file_id) will work.

Not populated attribute assigned_id of AIM entity applied_external_identification_assignment can be handled by

the proposed addition to Annex C.

Decision:

Rediscussion of ARM resulted in the following ARM changes in addition to proposed solution for #307:

1. Remove attribute document_file.location.

2. Rename AO alias_file_id to external_file_id.

3. Rename attribute alias_id of document_file to external_id_and_location pointing to external_file_id with

cardinality [0:?].

4. Rename attribute location of document_representation to common_location.

5. External_file_id maps to applied_external_identification_assignment, external_id to assigned_id.

6. document_location_property maps to etxernal_source, location_name to source_id

7. For document_representation pointing to document_location, assigned_id = ' '.

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 361

Originator:	P. Huau,GOSET,pascalhuau@csi.com	Date:	
Country No.:	FRA-91	Issue status:	accepted, Closed
Urgency:	major	Type:	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	Page:	
Related Part/UoF:	S1	Clause:	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

multi_language_string: Wrong mapping cases

Issue Description:

The mapping cases identified #1 and #2 are wrong as the concept of first element has no sense in the context of

an EXPRESS SET. In addition, the AP (clause 4.2) does not specify any particular role to any element of

multi_language_string.language_dependent_string. Therefore, such an index dependent interpretation should not

exist the mapping-table.

Proposed Solutions/Remarks:

Remove mapping cases #1 and #2. Note: the same removal should be done in the mapping-table of every attribute of type string_select (as the same problem occurs).

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Addressed by solution to issue #19

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 362

Originator:	P. Huau,GOSET,pascalhuau@csi.com	**Date:**	
Country No.:	FRA-92	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S1	**Clause:**	Cl. 5.1 (Mapping tables) ,
Sentence/abstract/keywords:			

item_instance: inconsistent mapping

Issue Description:

The object item_instance is mapped according two instanciation schemes, depending on whether the item_instance is used only as the related of a assembly_component_relationship or is used in another context (e.g. realization of a product_component or resource of a process_operation). The existence of a double instanciation scheme is not satisfactory because: - it creates an overload for implementors; - when reading a AP214 file, it is very complex to get all the information about an item_instance needed and to check whether this information is complete; - both instanciation schemes are not compatible, and , if an item_instance mapped with the first instanciation scheme, becomes used by other concepts than an assembly, then its instanciation has to be rebuilt (and consequently all the links that refer to the initial instances); - the second instanciation scheme is not compatible with the instanciation scheme chosen in US made APs (with all the misunderstandings, ambiguities and other rivalries this fact may involve). Therefore, we consider that only one instanciation scheme should exist for item_instance and that both the Integrated resources and the AP should be updated to enable this single instanciation scheme.

Proposed Solutions/Remarks:

(This proposal is made simultaneously to the request for the addition in ISO 10303-41 of the entity inter_product_definition_relationship relating two product_definition_relationships) Use, for item_instance, the instanciation scheme (used within the PDM schema) where the occurrence of an item is specified by an instance of product_definition_relationship. Consequently, update the mapping of all attributes referring to item_instance. In particular: - use inter_product_definition_relationship to relate two item_instances; - use inter_product_definition_relationship to relate a physical_instance referred to as

physical_assembly_relationship.physical_component to the item_instance referred to as physical_assembly_relationship.realization_of; - update the mapping of mated_item_relationship; - update the mapping of process_operation_resource_assignment.resource_definition

Discussed Solutions:

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The big issue!!!

Discussion:

AP214 DIS has a single concept for product structure on the ARM level, independent from the Conformance Classes CC6 or CC6.

However the mapping for S3 and S7 is different and leads to two non interoperable structures on AIM level. The reason for the different mapping is to be interoperable with both AP203 and AP212/AP210. This AP interoperability requirement leads to a conformance class interoperability problem within AP214.

There are two options to solve the problem:

- Have to different ARM structures for S3 and S7

- Make the S7 structure upward compatible to the S3 ones on AIM level

There are strong industry requirements to make the S7 product structure upward compatibel to the S3 structure. Having two solutions in the ARM is not acceptable for existing applications of AP214 and PDM Schema. Changing the mapping to make the two approaches interoperable has impact on AP212. For interoperability reasons, AP212 has to adopt the new mapping. Harmonization with AP210 will become a little bit more difficult, as AP210 supports only the S7 approach.

However, the compliance of AP212 with AAP214, AP203 and the PDM Schema is a major industry requirement.

The swedish delegation raised concerns due to foreseen problems in a data sharing scenario. Switching between Conformance Classes is a general problem for data sharing. A shared database which is CC8 compliant has to make sure that it keeps the database consistent.

Clarification on assignment of properties and relationships to ddid, item_instance and relationships (item_definition_instance_relationship):

- shape properties always go to assembly_component_usage, they are context dependent on the relationship

- other properties go to the product_definition which is the 'part occurrence'

- As the assignment of properties to item_instance is not possible in the S3 case, we may loose functionality with is currently in CC6

- A item_instance_relationship maps to a product_definition-relationship between two product_definitions (item_instance).

- Mapping shall ensure, that properties and relationships refering to an item_instance have to be the same for each product_definition_relationship refering the definition of the item_instance

Decision:

1. Item_instance always maps to product_definition_relationship between two product_definition being a 'xxx definition'. It maps to as many instances of product_definition_relationship as relationships refering to it. No S3/S7 OR case.

2. Assembly structures are always mapped as for S3 in AP214 DIS (Assembly_component_relationship maps to assembly_component_usage with related pointing to a product_definition being a 'part definition'.

3. In the S7 case, for each instance of item_instance, an instance of product_definition being a 'part occurrence' exists. All product_definition_relationship relating refering to such an instance are related to the product_definition by an new entity product_definition_occurrence_relationship. This is a AP214-specific subtype of an new entity to be introduced in Part41. The new entity in Part41 creates a relationship between a product_defiinition_relationship and a product_definition. The AP214 subtype contains a WHERE rule to state that a product_definition_relationship can be related to at most one product_definition.

4. Quantified_instance.quantity will be repeated at quantified_assembly_component_usage and the product_definition

5. A special review on the Mapping in the S7 case is required during FDIS qualifications. This will ensure that all mappings dealing with associations and references to item_instance are done correctly preserving the ARM semantics

Revised decision due to Part41/43/44.2 ballot workshop results:

Decision 3 above has to be modified. A new entity called product_definition_occurrence_relationship will be added to Part44. This entity relates a assembly_component_usage and a product_definition. The proposed mapping of item_instance has to be modified:

3a. Item_instance maps to an 3 OR cases:

    #1: if used without UoF S7

    #2: if used with UoF S7 and referenced by an assembly_component_ relationship

    #3: if used with UoF S7 and not referenced by an assembly_component_ relationship

    #1 maps to assembly_component_relationships

    #2 maps to both assembly_component_relationship and product_definition, related by product_definition_occurrence_relationship

    #3 maps to product_definition, only.

3b. Mapping of S7 entities (product_component, product_structure_relation, etc.) remain as in DIS

Incorporated Solutions:

The mapping of item_instance in UoF S7 has been harmonized with S3 by making the S3 mapping upward compatible. The S7 mapping uses in addition to the S3 mapping the entity product_definition_occurrence_relationship which has been introduced in part 44.

Decision:

1. Item_instance always maps to product_definition_relationship between two product_definition being a 'xxx definition'. It maps to as many instances of product_definition_relationship as relationships refering to it. No S3/S7 OR case.

2. Assembly structures are always mapped as for S3 in AP214 DIS (Assembly_component_relationship maps to assembly_component_usage with related pointing to a product_definition being a 'part definition'.

3.

3a. Item_instance maps to an 3 OR cases:

    #1: if used without UoF S7

    #2: if used with UoF S7 and referenced by an assembly_component_ relationship

    #3: if used with UoF S7 and not referenced by an assembly_component_ relationship

    #1 maps to assembly_component_relationships

    #2 maps to both assembly_component_relationship and product_definition, related by

product_definition_occurrence_relationship

  #3 maps to product_definition, only.

3b. Mapping of S7 entities (product_component, product_structure_relation, etc.) remain as in DIS

4. Quantified_instance.quantity will be repeated at quantified_assembly_component_usage and the product_definition

5. A special review on the Mapping in the S7 case is required during FDIS qualifications. This will ensure that all mappings dealing with associations and references to item_instance are done correctly preserving the ARM semantics

Issue Reference No.: 363

Originator:	F. CHAMBOLLE , PSA Peugeot Citroen , f-chambolle@calvanet.calvacom.fr	**Date:**	5th October 1999
Country No.:	FRA-93	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:	S8	**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Definition for the "condition" attribute of process_operation_relationship entity

Issue Description:

The role of the attribute condition is unclear: it specifies a kind of effectivity information. We do not understand why this information is not dealt with using the object effectivity or using the object configuration (that are more complete)? Besides, If condition is not populated, is the relationship valid or not?

Proposed Solutions/Remarks:

Remove the attribute condition. Add process_opreation_relationship in effective_element_select.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Remove attribute "condition".

Add process_operation_relationship to effectivity_element_select.

Incorporated Solutions:

process_operation_occurrence_relationship & process_operation_definition_relationship added to effectivity_element_select. done as proposed.

Issue Reference No.: 364

Originator:	O. Rocha, oscar.rocha@renault.fr	**Date:**	
Country No.:	FRA-94	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	xxv
Related Part/UoF:		**Clause:**	Introduction
Sentence/abstract/keywords:			

Wrong text in figure

Issue Description:

On the left side of the Figure 2 - Data planning model (page xxv) the text is wrong.

Proposed Solutions/Remarks:

Substitute « contents of CAx applications » by « contents of PDM databases » and substitute « contents of data bases » by « contents of CAx applications databases »

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

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Correct editorial error as proposed.

Incorporated Solutions:

Figure changed

Issue Reference No.: 365

Originator:	P. Huau, pascalhuau@compuserve.com	**Date:**	
Country No.:	FRA-95	**Issue status:**	accepted, Closed
Urgency:	major	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	
Related Part/UoF:		**Clause:**	Clause_1
Sentence/abstract/keywords:			

AP214 is not strictly limited to mechanical parts nor to automotive products.

Issue Description:

AP214 provides specifications that enable to represent items and product classes during their design. reading the specifications, AP214 is not strictly limited to mechanical parts nor to automotive products. On the other hand, the fact that the word ""automotive"" is present in the title of the protocol makes the protocol less acceptable for other industry domains (e.g. aerospace).

Proposed Solutions/Remarks:

Remove ""automotive"" in the title of the standard. Update the scope clause and AAM (figure A0) to present the automotive case only as an example of an industry domain where the protocol may be used.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

proposal from Pascal: change name of AP

Pascal checked with ISO Geneva; feedback: in general no problem, as long as scope does not change

Japan: agrees to enlarge the scope

Mathias Johansson: mobile phone industry wants to use the configuration capabilities of AP214

Sweden: is in favour with a change

Neil Laurance states that it may be dangerous to extend the influence on the document to a broader group of people in this stage

Mohrmann: describes that in future maintenance of the document is only possible via the modular approach. The question is, if we should make the change of the scope at this time, or if we should stay we the current name up to IS stage.

Discussion is, if change of name equals the change of the scope of the document. Question is if change for clarification purposes vs. change of scope from technical/functionality point of view.

Since it has to be avoided opening the discussions on AP214 for people who did not participate in the past and a slowing down of the process and further delay of the development is not acceptable, name will not be changed.

Incorporated Solutions:

no action required.

Issue Reference No.: 366

Originator:	Jim Kindrick	**Date:**	
Country No.:	USA-26	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.226
Related Part/UoF:		**Clause:**	Cl. 4.2 (ARM) , Annex_G
Sentence/abstract/keywords:			

Issue Description:

The requirement to represent properties for parts is always mapped using the general_property. In consequence AP214 compliant implementations are forced to always instantiate general_property when part properties are to be represented. Since PDM systems in general do not have the capability to distinguish between properties related to parts and properties as an independent general characterization, this requirement may be too difficult for implementations to satisfy.

Proposed Solutions/Remarks:

relax the requirement to make general_property optional

Discussed Solutions:

DIS Issue Resolution Workshop New Orleans 11/99

===

Discussion:

Having the general_property optional would require to introduce an OR case. As property area is a widely used in AP214, mapping would become rather complex. The OR case documentation would be difficult to formulate: What is the rationale for a dual mapping? How to qualify the reduced capabilities for harmonization with AP203 reasons.

Proposal to make an ARM change: Make definition pointer from property_value_representation to property optional. Add a reference from property_value_association to property to get the name. Proposal rejected as it introduces another complexity.

Clarification:

- Shape_dependent_property is not affected as there is no pointer to general_property in that case

- For the currrent mapping, a preprocessor who cannot export general_property cannot claim to be really AP214 compliant.

Decision:

Leave mapping as it is. Address in PDM Schema Usage Guide by adding a note:

- preprocessor: To be fully compliant with AP214 a general_property has to be created

- postprocessor: A postprocessor shall be able to read both cases

Incorporated Solutions:

no action required.

Issue Reference No.: 367

Originator:	Jim Kindrick	**Date:**	
Country No.:	USA-27	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.3.123
Related Part/UoF:		**Clause:**	Cl. 4.2 (ARM) ,
Sentence/abstract/keywords:			
Issue Description:			

The AP214 ARM says that the role name 'actual' shall be used for a date_time_role specifying the assignment of date/time to approval_person_organization. This role name is already used for approval_date_time to specify the actual date of an approval. In AP203 it is recommended to use 'sign off' as role name in date_time_role.

Proposed Solutions/Remarks:

change the role 'actual' to 'sign off' when assigning a date or date_time to an approval_person_organization for a multiple sign-off scenario involving multiple approval_person_organizations associated with a single approval.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Clarification reached that this issue addresses the same problem as issue #89. For that reason solution for #89 is revised.

Decision:

1. Change back AO approval attribute from sign_off_date tp actual_date

2. Change in following mappings

   - approval to date_and_person_organization (as is_approved_by)

   - date_and_person_organization to date_time (as actual_date), only for OR case #2

   date_role.name='actual' to date_role.name='sign off' and date_time_role.name='actual' to

date_time_role.name='sign off'

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 368

Originator:	Jim Kindrick	**Date:**	
Country No.:	USA-28	**Issue status:**	Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.442, 4.2.430
Related Part/UoF:		**Clause:**	
Sentence/abstract/keywords:			

mapping constraint on next_assembly_usage_occurrence.name

Issue Description:

Legacy implementations have used the name attribute of the next_assembly_usage_occurrence entity to represent the find_number (or position_number) of a part as it appears on a physical drawing. This conflicts with the AP214 usage of this attribute to distinguish single instances from selected instances.

Proposed Solutions/Remarks:

relax the mandatory requirement for this attribute population in the common case of a 'single instance usage' - restrict only in the case of a 'selected instance usage'.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Discussion:

Use of the name attribute to distinguish the item_instance subtypes is not necessary for most cases as specific subtypes are available: specified_instance, quantified_instance. The identification of Selected_instance by a subtype of next_assembly_usage_occurrence works for S3, but not for S7 as mapping of product_component/product_function to assembly_component_usage is not appropriate.

Decision: based on the solution of issue #362 (interoperability of S3 and S7 product structure) the mapping will be changed:

1. Keep the S7 mapping (name_attribute refering product_definiton with name = 'single instance', etc.

2. Mapping of item_instance subtypes in the S3 case:

   - Single_instance to assembly_component_usage

   - Quantified_instance to quantified_assembly_component_usage

   - Selected_instance to assembly_component_usage with product_definition_relationship.name = 'selected

instance usage'

   - Specified_instance to specified_higher_usage_occurrence

  There is no interoperability problem expected for Selected_instance as it is not used in AP203 and PDM

Schema.

Incorporated Solutions:

Mapping rule has been removed for single instance usages.

Issue Reference No.: 369

Originator:	Jim Kindrick	**Date:**	
Country No.:	USA-29	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.2.154, 4.2.155, 4.2.158, 4.2.160, 4.2.161, 4.2.396, 4.2.103, 4.2.402, 4.2.172, 4.2.303, 4.2.414, 4.2.299
Related Part/UoF:		**Clause:**	
Sentence/abstract/keywords:			
Issue Description:			

document properties use the representation.name attribute to indicate the name/type of the property. Part

properties, on the other hand, require general property and therefore use the property_definition.name attribute to

hold the same information. The same kind of property (e.g. remarks/notes) that is applicable to both parts and

documents must be represented in two different ways.

Proposed Solutions/Remarks:

relax the requirement to use 'property value' for the representation.name attribute when instantiating part

properties and allow for the use of this attribute to replicate the value of property_definition.name.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Agreement not to inforce the string 'property value' for representation.name. However, the replication of

property_definition.name should not be done.

Decision:

Remove mapping rule representation.name='property value' at mapping of AO property_value[_rep]

Incorporated Solutions:

incorporated as proposed

Issue Reference No.: 370

Originator:	Jim Kindrick	**Date:**	
Country No.:	USA-30	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	5.2.2
Related Part/UoF:		**Clause:**	
Sentence/abstract/keywords:			
Issue Description:			

organization_item (and person_organization_item) as well as date_item (and date_time_item) select types should include security_classification. The common use of a security_classification requires a person/organization (with role 'classification officer') and a date/time (with role 'classification date) be identified.

Proposed Solutions/Remarks:

enhance the select types to include security_classification.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

First part of the issue is addressed by the proposed solution for issue #90 (enhancement of the select type).

Decision:

Add role name 'classification officer' in person_organization_assignment.

Add role name 'classification date' in date_time_assignment.

Jim Kindrick will provide definitions.

Incorporated Solutions:

Added roles as proposed, for definition feedback from J. Kindrick required.

Issue Reference No.: 371

Originator:	Ray Goult	**Date:**	08.11.1999
Country No.:	UK-1	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.1.10 (G3)
Related Part/UoF:	G3	**Clause:**	Cl. 4.1 (UoFs) ,
Sentence/abstract/keywords:			

statement on containing geometric representation of points curves and of the wireframe_model_3D (G2) and the geometrically_bounded_surface_model (G8) is very misleading

Issue Description:

The statement that this unit of functionality contains the geometric representation of points curves and of the wireframe_model_3D (G2) and the geometrically_bounded_surface_model (G8) is very misleading - it does not, for example contain the composite_curve.

Proposed Solutions/Remarks:

Replace with a sentence such as:

This UoF contains the same geometric representations of points, unbounded curves and unbounded sufaces as in

G2 and G8 but, unlike these UoFs, does not support geometric constructs for bounding and connecting geometric objects.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Do as proposed.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 372

Originator:	Ray Goult	**Date:**	08.11.1999
Country No.:	UK-2	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.1.11 (G4)
Related Part/UoF:		**Clause:**	Cl. 4.1 (UoFs) ,
Sentence/abstract/keywords:			

including the Hybrid_geometric_model in UoF G4 (also in G3, G5)

Issue Description:

What is the justification for including the Hybrid_geometric_model in this UoF (also in G3, G5) since the models in G3, G4 and G5 have an absolute requirement for topological information and the Hybrid_geometric_model description requires that it shall contain no topology.?

Proposed Solutions/Remarks:

Remove from these UoFs.

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

- Create new UoF G9.

- Move Hybrid_geometric_model to G9.

see issue #331 (FRA-61).

Incorporated Solutions:

hybrid_geometric_model_3d moved to UoF S2, since it is a structuring method, see issue ref no 331.

Issue Reference No.: 373

Originator:	Ray Goult	**Date:**	08.11.1999
Country No.:	UK-3	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.1.9 - 4.1.15
Related Part/UoF:	G_1-8	**Clause:**	Cl. 4.1 (UoFs) ,
Sentence/abstract/keywords:			

inclusion of the Constructive_geometric_element and related objects in Geometric UoFs

Issue Description:

What is the justification for including the Constructive_geometric_element and related objects in these Geometric UoFs? Nothing in the scopes justifies this inclusion - these objects seem more relevant to draughting, annotation and tolerancing UoFs than to the `pure' geometric UoFs.

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

- Include AOs in new UoF G9 (Hybrid_model) and explain scope of UoF (Clause 4.1) appropriately.

see issues #331 (FRA-61), #372 (UK-2).

Incorporated Solutions:

constructive geometry related elements were moved to UoF S2, see issues ref. no 331, 372.

Issue Reference No.: 374

Originator:	Ray Goult	**Date:**	08.11.1999
Country No.:	UK-4	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.1.15 (G8)
Related Part/UoF:	G8	**Clause:**	Cl. 4.1 (UoFs) ,
Sentence/abstract/keywords:			

inclusion of composite_surface objects in G8

Issue Description:

I am surprised that this UoF does not include some form of composite_surface object - the rectangular_composite_surface entity is in the scope of AIC part 507 which, I believe relates to this UoF.

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

- no ARM change

- include in 4.1: It includes elementary, sculptured as well as composite surfaces.

- adapt definition of AO surface as well accordingly (add a Note that composite surfaces are also considered as a minimum)

ISO/DIS 10303-214 – Issue log

Incorporated Solutions:

done as proposed.

Issue Reference No.: 375

Originator:	Ray Goult	**Date:**	08.11.1999
Country No.:	UK-5	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	Annex A
Related Part/UoF:		**Clause:**	Annex_C
Sentence/abstract/keywords:			

definitions in annex should be brought up to date with the latest available versions of IR's

Issue Description:

The definitions in this annex should be brought up to date with the latest available versions (Revision 1 of parts 41-44 and IS version of most AICs.) In particular I noted that advanced_brep from part 511 was taken from DIS and contained an error corrected at DIS ballot, csg_shape_representation also did not include final revisions.

Proposed Solutions/Remarks:

The definitions in this annex should be brought up to date with the latest available versions

Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Do as proposed:

latest reviesion of the AICs (IS versions) will be used for AP214 FDIS.

Incorporated Solutions:

done as proposed.

Issue Reference No.: 376

Originator:	Chris Vaughan	**Date:**	08.11.1999
Country No.:	UK-6	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	Scope of UoFs
Related Part/UoF:		**Clause:**	Cl. 4.1 (UoFs) ,
Sentence/abstract/keywords:			

Definition of Scope and included uoF Scope

Issue Description:

Some define their scope and then use AOs that are wider in scope, I think this is wrong.

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Issue rejected. Too unspecific: What UoFs, what AOs ?

Incorporated Solutions:

no action required.

Issue Reference No.: 377

Originator:	Chris Vaughan	**Date:**	08.11.1999
Country No.:	UK-7	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.1.22 product management data (S1)
Related Part/UoF:	S1	**Clause:**	

Sentence/abstract/keywords:

units and values in S1

Issue Description:

This contains units and values - I don't see how these are relevant to this UoF:

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Issue rejected.

Basic concepts that are used all over the AP are included in UoF S1 (UoF is intended to contain this information).

Incorporated Solutions:

no action required. Basic concepts that are used all over the AP are included in UoF S1 (UoF is intended to contain this information).

Issue Reference No.: 378

ISO/DIS 10303-214 – Issue log

Originator:	Chris Vaughan	**Date:**	08.11.1999
Country No.:	UK-8	**Issue status:**	rejected, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.1.4 external reference mechanism (E1)
Related Part/UoF:	E1	**Clause:**	Cl. 4.1 (UoFs) ,

Sentence/abstract/keywords:

UoF contains a number of AO that are geometry based rather

than external references

Issue Description:

This contains UoF contains a number of AO that are geometry based rather

than external references

1.. Accuracy

b.. Cartesian co-ordinate space);

c.. Geometric model relationship

d.. Geometric model relationship with transformation

e.. Item shape;

6.. Shape description association

7.. Shape element

8.. Shape element relationship

9.. Transformation

These should be in separate UoFs.

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Issue rejected. AOs are needed for digital mock-up applications with externally defined geometry, e.g. native

files.

Incorporated Solutions:

no action required. AOs are needed for digital mock-up applications with externally defined geometry, e.g. native

files.

Issue Reference No.: 379

Originator:	Chris Vaughan	**Date:**	08.11.1999
Country No.:	UK-9	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	technical
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.1.18 item property (PR1)
Related Part/UoF:	PR1	**Clause:**	Cl. 4.1 (UoFs) ,

Sentence/abstract/keywords:

more generic method of defining what the property needed

Issue Description:

This UoF only defines a small number of properties and has a simple representation embedded in it. I think that when we modularise this area we need a more generic method of defining what the property is and then associating a type of representation with it. I think this is a major area of concern.

Also the Cost AO in this UoF does not specify what it is the cost of.

Is it the cost (predicted or actual) to

  a.. design the product,

  b.. make it,

  c.. what it sells at?

Does it support the cost changing with time?

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

Already available, no action required.

There is a destinction in the ARM of :

1. The definition of a property (AO (ABS) property) with its specified subtypes
    (selection from AP214's requirements perspeective) including general_property
    as the generic concept to define any kind of porperty.

2. The representation of the property in terms of values for the defined property with
    AO property_value and the definition of different kind of values (string, value_list,
    value_with_unit). Also attribute value_determination makes the destinction for
    different interpreatations of the given values, e.g. for cost property 'calculated', 'required' and others.

3. The association of property values to product data through AO property_value_association
    for properties applied to item/product information (item_property_association) or process
    information (process_property_association). With property_value_association.validity context
    also the context of an organization may be specified, e.g. for costs the purchasing costs of the same part
    from different organizations (supplier, dealer) may be specified.

4. Changing of property_values over time is also supported by the change information of the associated
    objects (change management), see also AO property_change in the ARM.

Incorporated Solutions:

Already available, no action required.

There is a destinction in the ARM of :

1. The definion of a property (AO (ABS) property) with its specified subtypes
    (selection from AP214's requirements perspeective) including general_property
    as the generic concept to define any kind of porperty.

2. The representation of the property in terms of values for the defined property with
    AO property_value and the definition of different kind of values (string, value_list,
    value_with_unit). Also attribute value_determination makes the destinction for
    different interpreatations of the given values, e.g. for cost property 'calculated', 'required' and others.

3. The association of property values to product data through AO property_value_association
   for properties applied to item/product information (item_property_association) or process
   information (process_property_association). With property_value_association.validity context
   also the context of an organization may be specified, e.g. for costs the purchasing costs of the same part
   from different organizations (supplier, dealer) may be specified.

4. Changing of property_values over time is also supported by the change information of the associated
   objects (change management), see also AO property_change in the ARM.

Issue Reference No.: 380

Originator:	Ray Goult	**Date:**	08.11.1999
Country No.:	UK-10	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.1.14 (G7)
Related Part/UoF:	G7	**Clause:**	Cl. 4.1 (UoFs) ,
Sentence/abstract/keywords:			

scope description should be amended

Issue Description:

Since the swept_face_solids are within the scope of this UoF the second paragraph of the scope description sould
be amended to add these to the list of things that be combined in Boolean operations (after half spaces solids).

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

===

- Do as proposed.

Incorporated Solutions:

do as proposed.

Issue Reference No.: 381

Originator:	Ray Goult	**Date:**	08.11.1999
Country No.:	UK-11	**Issue status:**	accepted, Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	4.1.13 and Table 14
Related Part/UoF:		**Clause:**	Cl. 4.1 (UoFs) ,
Sentence/abstract/keywords:			

mapping provided for the general case of a `mixed' topologically_connected_set containing both edges and faces

Issue Description:

I cannot see what mapping is provided for the general case of a `mixed' topologically_connected_set containing
both edges and faces. Mapping table 14 only illustrates the cases #1 (edges only) and #2 (faces only).

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Already available, no action required.

#1 is the mapping of the mixed case: OR case "compound_model" allows referencing a set of edges and a set of faces that may be topologically connected.

Incorporated Solutions:

requirement is captured in AO compound_model, UoF G6: already available. Enhanced text of OR case #1 for compound_shape_representation, which provides the capability in AIM: In case that connected_edge_sets and connected_face_sets are used in the same compound_model.

Issue Reference No.: 382

Originator:	Ray Goult	**Date:**	08.11.1999
Country No.:	UK-12	**Issue status:**	Closed
Urgency:	minor	**Type:**	editorial
Related Document:	SC4 WG3/N765 (ISO/DIS 10303-214)	**Page:**	Clause 2
Related Part/UoF:		**Clause:**	Clause_2
Sentence/abstract/keywords:			

The normative reference to part 42 should be to the latest Revision 1 document not to 1994 edition.

Issue Description:

The normative reference to part 42 should be to the latest Revision 1 document not to 1994 edition.

Proposed Solutions/Remarks:
Discussed Solutions:

AP214 DIS Issue Resolution Workshop New Orleans 11/99

==

Issue is under consideration.

It will be checked for inpact in CAx Implementers Forum concerning existing implementations.

If accepted

a. Part 42 Ed. 2 will be normatively referenced by AP214 FDIS version.

b. New entity seam_edge will be explicitly referenced from Part 42.2 in order to make this
   functionality available for geometric implementations.

If not accepted by the Implementers Forum (no intend to implement the functionality)

the issue will be rejected (no changes from DIS version of AP214 to not affect existing

implementations - even if Part 42.2 is basically upwards compatible).

Incorporated Solutions:

Reference to Revision 1 incorporated.

Annex A: Reference list ordered by original country numbers

France	
FRA 1	271
FRA 2	272
FRA 3	273
FRA 4	274
FRA 5	275
FRA 6	276
FRA 7	277
FRA 8	278
FRA 9	279
FRA 10	280
FRA 11	281
FRA 12	282
FRA 13	283
FRA 14	284
FRA 15	285
FRA 16	286
FRA 17	287
FRA 18	288
FRA 19	289
FRA 20	290
FRA 21	291
FRA 22	292
FRA 23	293
FRA 24	294
FRA 25	295
FRA 26	296
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FRA 28	298
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FRA 31	301
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FRA 34	304
FRA 35	305
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FRA 89	359
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FRA 92	362
FRA 93	363
FRA 94	364
FRA 95	365

Germany	
GER 1	1
GER 2	2
GER 3	3
GER 4	4
GER 5	5
GER 6	6
GER 7	7
GER 8	8
GER 9	9
GER 10	10
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